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**Intervention, Opportunity and Response:
A Clash of Paradigms in
Smallholder Cattle Projects in Samoa**

A thesis presented in fulfilment of

the requirements for the degree of

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Abstract

This thesis examines the notion of development as a process of interaction and negotiation between two cultures: the Western development project subculture and, in this case, Samoan culture. It analyses the origins, issues and implications of misunderstandings and misinterpretations that result from this process.

Specifically this thesis investigates the validity of expressed Western perceptions and interpretations of Samoan cattle-farming behaviours that are characterised as irrational in project literature. This is done by examining the role and incorporation of cattle into Samoan culture, society and livelihoods to determine if there are rational explanations, based in Samoan culture and cultural values, for the ways Samoan farmers utilise cattle, particularly in traditional exchange occasions (*fa'alavelave*). In doing this, efforts are made to provide a perspective from the Samoan viewpoint.

Conventional Western interpretations are found to be grossly misinformed. The origins of misinterpretations between the two cultural perspectives (Western/Samoan) and implications for approaches to development projects and development theory are drawn out. Cultural misinterpretations in projects are seen as consistent with, and a function of, the role ascribed to culture in modernisation and liberal modernisation theory.

On one hand cultural interaction resulted in misinterpretation. On the other hand, it resulted in endogenous development. This thesis finds that cattle have been actively incorporated into Samoan traditional and modern activities and livelihoods by Samoans according to their own culturally determined priorities and criteria. This thesis argues that this may be considered successful development and therefore that the protestations that can be traced to the practice of modernisation theory are an irrelevant non-issue.

The endogenous development that did occur may be seen as a process of cultural interaction and negotiation which can be usefully informed by populism. The tenets that would underpin a new theory of development are suggested as rooted in basic human psychological needs which motivate development activity. This can be combined with the concepts of moral economy and active response to other cultures found in populism and concepts of diversity from post-modernism to form the basis of a new theory of development.

In loving memory of my mother-in-law

Taua Maiava Gaugatao Papali'i

and my grandmother

Hazel May Blake

"Though I am free and belong to no man, I make myself a slave to everyone, to save as many as possible. To the Jews I became like a Jew, to save the Jews. To the Gentiles I became like a Gentile, so as to save the Gentiles. To the weak I became weak, to save the weak. I have become all things to all men so that by all possible means I might save some" (1 Corinthians, 9:19-22)

"Some of the dominant class join the oppressed in their struggle for liberation ... as they move to the side of the exploited they almost always bring with them the marks of their origin. Their prejudices include a lack of confidence in the people's ability to think, to want, and to know ... They talk about the people but they do not trust them; and trusting the people is the indispensable precondition for revolutionary change" (Paulo Freire, 1972:36)

Dedicated to all the smallholder cattle farmers of Samoa

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Acronyms and Abbreviations

ADB	Asian Development Bank
AIDAB	Australian International Development Assistance Bureau
DAFF	(WS) Department of Agriculture, Forests and Fisheries
EAPU	(DAFF) Economic Analysis and Planning Unit
FAO	(UN) Food and Agriculture Organisation
GOWS	Government of Western Samoa
GRM	GRM International Pty Ltd
IFAD	(UNDP) International Food and Agricultural Development
MFAT	(NZ) Ministry of Foreign Affairs and Trade
MIRAB	Migration, Remittances, Aid and Bureaucracy
NZODA	New Zealand Overseas Development Assistance
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
USP	University of the South Pacific
WESTEC	Western Samoa Trust Estates Corporation

Glossary of Samoan Words and Phrases

<i>aiga</i>	family
<i>aiga potopoto</i>	extended family
<i>alofa</i>	love
<i>fa'afafine</i>	a man with feminine characteristics
<i>fa'aipoipoga</i>	wedding
<i>fa'alavelave</i>	1. problem or difficulty 2. traditional ceremonial exchange occasion
<i>fa'anofonofo</i>	conferment of a <i>matai</i> title to a woman
<i>fa'aSamoa</i>	'the Samoan way' (Samoan culture)
<i>fa'aulufalega</i>	church dedication
<i>fale</i>	house or building
<i>faletua</i>	wife of a <i>matai</i> (<i>ali'i</i>)
<i>fesoasoani i le aiga</i>	helping (supporting) the family (both culturally and materially)
<i>fiafia</i>	happy, pleased
<i>fia palagi</i>	wanting to be like a European (and not like a Samoan by implication, meant as a criticism)
<i>fiatagata</i>	being snobby, showing off
<i>fono</i>	village 'council'; meeting of council of <i>matai</i>
<i>fua'ifale</i>	household
<i>'ie toga</i>	fine mats
<i>lafumanu papalagi</i>	cattle herd/ cattle farming (formal usage)
<i>malae</i>	grassed area in centre front of a village
<i>maliu</i>	funeral
<i>manu papalagi</i>	cattle (formal usage), plural
<i>manu palagi</i>	cattle (formal usage), singular
<i>matai</i>	chief/chiefs, either <i>ali'i</i> or <i>failauga</i> (orator)
<i>musu</i>	sulking and unco-operative
<i>nu'u</i>	village
<i>palagi</i>	a non-Samoan, usually a European person
<i>povi</i>	cattle (casual usage), singular or plural
<i>pule</i>	authority
<i>pulenu'u</i>	village 'mayor'; official village representative to government, elected by the village <i>fono</i>
<i>pasese</i>	bus fare

<i>saofa'i</i>	conferment of a <i>matai</i> title (for men)
<i>sua</i>	traditional welcome
<i>su'e tupe</i>	searching for money
<i>supo</i>	vegetables, noodles and meat in a thin soup
<i>tala</i>	Samoa currency, in 1994 \$NZ1 bought about \$1.6 tala
<i>taule'ale'a</i>	untitled man
<i>taulele'a</i>	untitled men
<i>tautua</i>	traditional service of the old by the young
<i>to'ona'i</i>	Sunday mid-day meal
<i>tupe</i>	money
<i>ua lava</i>	enough (to satisfy)

Chapter One

Introduction: Objectives, Outline of Thesis and Research Design

1.1 Introduction and Objectives

The idea for this thesis began after I had been living in Samoa (formerly Western Samoa) for six years, moving amongst both expatriates and Samoans. I also had a background knowledge of cattle farming in New Zealand. It was the combination of these two factors which caused me to hypothesise that what development consultants (often referred to as 'experts') believed about smallholder cattle farmers and smallholder cattle farming in Western Samoa did not match what was actually happening at village level. I believed that there was a great deal of misunderstanding about the incorporation of cattle into Samoan culture and that this lack of appropriate knowledge might be a factor that could constrain project success.

In 1987 I surveyed 68 smallholder cattle farmers in preparation for an M.A. in Rural Development at the University of Reading (although later I did not use these data). Some consultants working for IFAD heard about this and contacted me. I recorded some of our meeting as follows:

"I was approached by two members of an IFAD mission who were in Samoa to make recommendations for an IFAD cattle project to benefit the poorest Samoans. They had heard that I was making a study of the incorporation of cattle into Samoan life and asked if I might be able to tell them something of what I had found. I was invited to their hotel room where we talked.

During our conversation I asked if they had visited any farms or talked with village farmers. "No" I was told. So I asked if they had talked to any farmers when they came into town. Again the answer was "No, we're only here for three weeks, we've been here two already, and I don't think we'll have time for that".

Later in our conversation, when discussing training, one member said "Well of course you have to treat them like children really".

At the end of our conversation I asked if I might be able to have a copy of their report. "I'm sorry, it's confidential" I was told" (Maiava,1988:3)

This meeting reinforced my conceptualisation of development as a process of cultural interaction, often involving mis-communication and mis-understanding which, in turn, impacted on the development process. In addition to a general belief that Samoan culture was a constraint to development, there were three specific assumptions regarding cattle that development consultants and Westernised urban Samoans made. These centred around the role of traditional ceremonial exchange occasions (*fa'alavelave*) in the development of the smallholder cattle sector.¹ First, they believed that farmers killed the breeding stock (cows and heifers) for *fa'alavelave*. Second, that *fa'alavelave* were the main constraint facing the development of smallholder cattle farming, and third, that *fa'alavelave* were a waste, of no use or simply "bad" (Maiava,1993:252). There was also a fourth assumption: that in Samoa the community is the unit of production and therefore communal projects are somehow 'better'.²

However, I did not find any evidence that these beliefs had been empirically researched or substantiated in a scientific way. What was stated as truth in project documents was not originally sourced, but often quoted from secondary sources.³ Had development practitioners fallen into the trap of accepting perpetuated myths as truth, reinforced by frequent re quoting?

It was, then, my original objective in 1987 to research these assumptions empirically. Were they actually true or not? How did cattle farmers decide which animals to kill for *fa'alavelave*? How did consumption for *fa'alavelave* compare to other constraints and losses facing farmers? Were *fa'alavelave* of no value? Did they have advantages for development?

Did they only play a negative role in the growth of the smallholder cattle sector? Did the perpetuation of these assumptions in itself constrain project success?

This objective had three components:

1. To empirically evaluate the role of Samoan culture in cattle farming with a focus on *fa'alavelave*, and to measure farmers' success (or lack of success) with cattle and changes over a seven year period from mid-1987 to mid-1994, in order to test whether the 'four assumptions' were correct or not. This required quantitative research methods.
2. To learn what the situation regarding cattle really was from the farmers' point of view. To gain qualitative insights into the role of cattle in Samoan culture, cattle in the farming system, and the origins of farmers' behaviour in their attitudes and values. This required qualitative research methods.
3. To compare and contrast these findings with the perceptions and assumptions of development consultants, advisors and project management about smallholder cattle farmers, the incorporation of cattle into Samoan culture and the role of Samoan culture in smallholder cattle farming. To examine how these perceptions were influencing project design, project success or failure and the 'people-project interface'.

The data I collected in 1987 indicated that smallholder cattle farming in Samoa was 'not the world's greatest success story' (Maiava,1993); that there was quite a high level of failure with cattle among smallholders. When the opportunity came to begin this thesis I realised that my earlier unused data gave me the opportunity to do a longitudinal study of the shortcomings of smallholder cattle projects in Samoa. I expected to find that negative attitudes towards farmers were contributing to project failure. During field work in 1994, however, I found that instead of failure, cattle development in the smallholder sector in Samoa was making considerable progress and the situation I encountered in 1994 was quite different from the one I had measured in 1987.

That is not to say that there were not problems to be overcome and knowledge to be gained, but it did create a dilemma for me in that it put my chosen perspective in need of revision. I could not seriously criticize something that was going pretty well or make much progress by

suggesting how things could be done better. Instead I would have to examine the progress that had been made, especially the progress that farmers had made on their own initiative. How did this relate to their culture and to their aspirations? What were the nature of their initiatives? What was the story of their success?

In summary, the central purpose of this thesis is to tell the story of the smallholder cattle farmers of Samoa within the context of cattle development projects. This thesis investigates the validity and credibility of common Western perceptions and interpretations of Samoan cattle farming and utilisation behaviours by examining the role and incorporation of cattle into Samoan culture, society, livelihoods and farming systems. Mis-interpretations and misunderstandings are examined to identify their theoretical origins, to draw out implications for project planning and research, to test and inform theories of development that are practiced in the Pacific, and, importantly to suggest directions for future theory generation. This thesis examines a meeting of worlds; a clash of paradigms. It aims to examine development as a process in which cross-cultural interventions are made, opportunities are perceived and responses are negotiated, but seldom as expected.

1.2 Outline of Thesis

The first section of this chapter outlined the central objectives. The rest of the chapter outlines Chapters Two to Eight and describes the research methodology, the philosophy behind it and how the methodology enables the major questions raised in this thesis to be answered. The central objectives are met by asking a series of key questions. Table 1.1 outlines these and the chapters in which they are addressed.

Chapter Two establishes the broad theoretical context of this thesis, including the role ascribed to traditional cultures by the major paradigms of development. The paradigms that will be analysed include modernisation theory; liberal modernisation and the contribution of a Marxist perspective; a third paradigm, including people-centred development, populism, and the contribution of post-modernism, and the MIRAB model of development in the Pacific. These paradigms of development have been selected for analysis because the findings of this thesis will show that one or more of them more adequately account for the findings while others prove inadequate. In part, this thesis provides a test of the validity of

these paradigms, with particular focus on modernisation and populism. But, more importantly, they provide a source of ideas, some by contrast, for new theory generation.

Table 1.1: Key Questions Raised in this Thesis and the Chapters that Address Them

Chapter 1:

What is the central hypothesis?

What are the key questions this thesis will attempt to answer?

Chapter 2:

What is the role given to culture by the major theories of development?

What are development projects and how do people interact with them?

Chapter 3:

How is Samoan culture perceived when development theories are applied in practice to agricultural and cattle development in Samoa?

Chapter 4:

What is Samoan culture in contemporary Samoa?

Chapter 5:

What is the role of cattle in *fa'alavelave*?

What is the role of *fa'alavelave* in smallholder cattle farming?

Are *fa'alavelave* a constraint or a motivation to cattle farming?

Chapter 6:

What are the roles of cattle in Samoan culture, social change, livelihoods and farming systems?

Chapter 7:

What is project success and how successful have smallholder cattle projects in Samoa really been?

How do the perceptions and assumptions about smallholder cattle farmers established in Chapter 3 compare with the findings in Chapters 5 and 6?

How has this influenced project design and perceptions of project success?

Chapter 8:

What are the central findings of this thesis?

Where is this research located in development literature?

Which paradigms of development most adequately predict and explain the findings?

How can the findings of this thesis inform development theory and development practice?

Chapter Two also examines the 'development project' which provides the context for this thesis, and reviews the critiques it has received and the issues facing projects, including appropriateness, participation and sustainability. It considers the way the recipients of development opportunities and projects react, respond, interact and negotiate with projects in both positive and negative ways, as an introduction to the ways cattle farmers in Samoa interact with the opportunities cattle projects offer.

Chapter Three examines how theories of development, particularly modernisation, have influenced the interpretation of the role of Samoan culture in development over several decades and how tradition and its role in development in Samoa have been viewed and interpreted in the literature on development in Samoa. It will compare views that have seen culture as a constraint with those that see it as functional and rational, including views expressed in literature and documents relating to smallholder cattle farmers. The origins of these interpretations in relying on secondary sources and the deductive extrapolation of theory rather than empirical primary data will be discussed. More recent repudiations of the traditional assumptions about Samoan culture, suggesting the emergence of an anti-thesis, will also be given.

Chapter Three also discusses how the interpretations of the role of Samoan culture, with their origins in modernisation theory, have influenced the direction of development, particularly in agriculture. Examples are given to illustrate how these assumptions and perceptions about smallholder cattle farmers are found in project documents and other documents specifically relating to cattle in Samoa, in which Samoan culture, and *fa'alavelave* in particular, receive a significant portion of blame for the alleged failure of cattle projects. Chapter Three provides the background to the central hypothesis of this thesis: that the 'four assumptions' introduced in Chapter One will be found to be incorrect when carefully scrutinised using empirical testing.

Chapter Four introduces Samoan culture and particularly those aspects this writer believes to be relevant to an objective understanding of the role of Samoan culture in cattle development and the role of cattle in Samoan culture. This includes an understanding of the role of *fa'alavelave* in contemporary Samoan culture. It introduces the cultural context within which cattle have been adopted and introduces some of the values, behaviours,

strategies and contradictions within Samoan culture that must be understood before examining how cattle have been incorporated into it.

The importance of family relationships, the *matai* system, and contradictions such as that between 'rage and obligation' and 'co-operation and competition' (Freeman,1983) are examined. It also examines the system of exchange and distribution, material aspirations, the role of work and income, what O'Meara (1990) has termed 'the search for money' and the strategy of 'straddling economies'. Changes that have been occurring within Samoan culture, such as the move towards 'customary individualism' (O'Meara,1987) and the motivations for them are pointed out. It is suggested that changes seen when looking specifically at the adoption of cattle mirror wider cultural changes. That is, examining cattle offers a wider understanding of Samoan culture and the changes occurring in Samoan society. Such changes include those regarding land tenure, the extended family and increasing individualism.

Samoan culture has been blamed for the supposed failure of cattle projects. Chapter Five examines the interaction between cattle and Samoan culture to test this question, focusing specifically on *fa'alavelave*. While Chapter Three examines culture as a constraint, Chapters Four and Five examine it as a motivation.

Cattle are part of the changing nature of *fa'alavelave* (traditional) exchange occasions which include funerals. One funeral, which the writer observed, is described in detail to allow a deeper understanding of the role of cattle in the formal culture, and their significance, meaning, and importance in funerals. Empirical data regarding the contribution of cattle to *fa'alavelave* and changes observed between 1987 and 1994 are presented. This chapter also examines farmers' views regarding the contribution of cattle to *fa'alavelave*, and *fa'alavelave* as a source of motivation for raising cattle, and compares this with the attitudes towards *fa'alavelave* found in literature and project documents, which see them as a constraint to cattle farming.

Chapter Six focuses closely on cattle in Samoan culture, using a case study of cattle in the village of Sato'alepai. It also examines cattle farmers and their experience, attitudes and motivations, management practices and the incorporation of cattle into and impact on the farming system, the sequence of technical change and adoption, farmer reasoning behind

these changes, and initiatives taken by farmers themselves. This chapter, like Chapter Five, presents a view from the farmer's perspective. Having come to understand that each cattle farmer is unique, it also makes use of case studies to illustrate the depth and richness of their experience, using both material from interviews and participant observation, in addition to quantitative data.

Chapter Six examines the social and cultural impact of cattle, their multiple roles and uses in Samoan culture. A number of issues are explored including the role of cattle in 'supporting the family' and easing workloads. In addition cattle are considered for their value as a buffer against both modern and traditional demands, enabling a certain independence, and also for their versatility which offers a greater measure of security in coping with uncertainty. This is placed in the wider context of Samoan farming systems and the recent agricultural history of Samoa including wild fluctuations in crop prices, two severe cyclones and the recent devastating taro blight. In addition, technical issues relating to raising cattle in the tropics and the technical problems faced by farmers are examined.

Chapter Seven introduces the history of cattle projects in Samoa up to 1994, and, by examining the success shown by cattle farmers between 1987 and 1994, questions whether cattle projects have actually failed. It examines the farmer-project interface as an active process of intervention and response and considers how farmers have perceived and responded to cattle projects, and the motivations behind farmers' attitudes and responses, including positive, negative, and manipulative responses. The criteria for analysing project success or failure is re-examined, returning to the themes of 'the four assumptions' and 'culture: constraint or motivation?'. Conclusions are drawn for the future development of the smallholder cattle industry and cattle projects in Samoa by analysing previous mistakes along with current successes.

Chapter Eight, the final chapter, locates the findings of this thesis within the body of research on cattle farmers in Samoa and cattle projects in the Pacific, social changes in Samoa and within wider development thinking and knowledge. It assesses how each of the theories or paradigms of development have informed the practice of cattle development projects in Samoa and which, if any, are able to explain the Samoan response to the opportunities offered by cattle. In doing so it seeks to determine whether the Samoan experience is able to offer a contribution to the wider paradigms of development theory,

particularly in the generation of new theory, and to the practical application of these models in development practice.

1.3 Research Design and Methodology

The research design was based on the need to use both quantitative and qualitative methods in order to achieve the twofold nature of the objectives. The primary objective of this thesis was to test unresearched assumptions that were made about farmer behaviour. Much of what was believed about Samoan cattle farmers was anecdotal, not based in empirical research and this, I hypothesised, had led to the perpetuation of myths that had resulted in inappropriately designed projects in the past.

This thesis had to first answer a number of highly specific numerical questions in order to measure the contribution of cattle to *fa'alavelave* and the progress or lack of progress farmers were making. To do this required indisputable objective quantitative empirical data using conventional survey techniques and statistical analysis (Bulmer and Warwick,1983a; Dixon and Leach,1984; Casley and Lury,1987). The survey questions were based on a series of mini-hypotheses which in turn were derived from the need to answer the key questions shown in Table 1.1.

Once that was established, qualitative data could be used to add richness and depth. Rather than just offering a criticism, I wanted to replace mis-information with a better quality of research-based knowledge about Samoan smallholder cattle farmers and the role of cattle in Samoan culture. While farmers had many things in common, each farmer's unique experience meant each had a unique story to tell and this could easily be lost in the application of traditional quantitative statistical methods.

The methodology of the qualitative component of this research includes the traditional anthropological methodologies of ethnography and participant observation (Wax,1971; Hammersley and Atkinson, 1983; Salmen, 1987; Glesne and Peshkin,1992). In addition, the principles of 'researching lived experience' (van Manen,1990; Deekerman,1994) and 'actor-oriented research' (Long,1992; Long and van de Ploeg,1994) guided the practice and analysis of the observations made. The principles of listening to the voice of the participants in development (Chambers,1983) and 'participatory action research' (Tandon,1988; Fals-

Borda and Rahman,1991; Rahman,1993), in which participants design and carry out the research, were also influential. However, it cannot be said that the respondents were participants in designing or implementing this research.

The concept of 'researching lived experience' derives from Hermeneutics: "the theory and method of interpreting meaningful human action" (Abercrombie,1988:112). It emphasises understanding the meaning of observed behaviour which is an expression of 'lived experience'. The methodology essentially requires the researcher to put themselves in the position of the researched; to see through their eyes, reaching understanding by sharing a common humanity. The second aspect is understanding behaviour in relation to the larger world view of the society that produced it, and which gives it meaning. Likewise, phenomenology takes as its main aim the analysis and description of everyday life and the life-world or the everyday world as it is experienced and taken for granted by ordinary people (Abercrombie,1988:184).

The methodology of researching lived experience includes:

"investigating experience as we live it rather than as we conceptualize it ... reflecting on the essential themes which characterize the phenomenon ... [and] balancing the research context by considering parts and whole" (van Manen, 1990:30-31)

The initial emphasis of this methodology is on the uniqueness of each lived experience and the gathering of individual stories. It was this that made this approach so applicable to this thesis as I became very aware of the uniqueness of each cattle farmer's experience while surveying individual farmers. Each lived experience is recorded, reflected on and interpreted to find its special significance or fundamental essence. The researcher then considers his/her gathered collection of lived experiences over and over again to discover what is shared; what essential themes or patterns are revealed (Deekerman,1994).

Glesne and Peshkin (1992:55) quote Freud: "look at the same things again and again until they themselves begin to speak". This is advice to participant observers and there is much in common, for the purpose of this thesis, between researching lived experience and participant observation. Researching lived experience could perhaps be considered 'post-modern

ethnography'. Participant observation is, however, more applicable to groups or communities than individuals, and was used in a village-based case study in this thesis. Of participant observation, in which ideally the observer, by virtue of being a member of the group, is able to observe intimately and covertly, Glesne and Peshkin write:

"through being a part of a social setting - you will learn firsthand how the actions of your others [respondents] correspond to their words; see patterns of behaviour; experience the unexpected, as well as the expected; and develop a quality of trust with your others that motivates them to tell you what otherwise they might not" (Glesne and Peshkin,1992:39)

Again the emphasis is on taking a learning stance, learning from people in order to understand what they know already (ibid:42). This is echoed in Long's 'actor-oriented' approach to research which begins with the assumptions that the actors being researched are knowing, capable and active, and which acknowledges their life-worlds and experience as relevant to understanding the interactive processes of development (Long,1992:23).

Long's approach, unlike those described above, is derived directly from his experience of research in the Third World and in the context of the experience of development. Because of this he emphasises the essential importance of 'agency' (Long and van de Ploeg,1994:65) as the actors themselves make deliberate attempts to intervene in the course of events and 'make a difference'. Booth describes the methodology of this approach as 'interface analysis' which focuses on "interactive relations at the 'interface' between official agencies of rural development and their clients" (Booth,1994:16) and is a convergence between anthropological interactionism and rational choice analysis (ibid:13).

These then are the influences on the approach to the qualitative component of this thesis. I also took comfort from van Manen (1990:30, his emphasis) who stated that "*the method of phenomenology and hermeneutics is that there is no method!*" and trusted the smallholder cattle farmers to teach me what I needed to learn.

Glesne and Peshkin (1992:39) describe the participant observer as a "trusted person". I had been able to gain this status not from the two weeks spent there in 1994, but from the previous eight years of regular contact through marriage to a *matai* of the village which gave

me the status of *faletua*. In the continuum: observer, observer as participant, participant as observer, full participant (Glesne and Peshkin,1992:40), I was, in 1994, more an observer than a participant. However, I had previously participated in several *fa'alavelave* in the roles ascribed to a *faletua*, particularly in the display of fine mats. Thus over those years I had become well acquainted with Samoan cultural roles and meanings; the 'strange' had become 'familiar' (ibid:42).

The two main ways qualitative data have been gathered in this thesis are by the use of open questions in survey interviews and by participant observation with particular focus on one village including a group discussion, observations of cattle farming practices, and the observation of a funeral including the social and physical preparation. This thesis makes use of both qualitative and quantitative research methods as well as secondary data such as project documents and historical material in order to capture both breadth and depth: the breadth by using quantitative methods to achieve rigor and the authority to generalize, and the depth by slower, more careful, close-up qualitative examination.

The integration of methods itself adds greater strength to research: if the two types of data give similar results then the research is made stronger and allows greater confidence in the conclusions (Whyte and Alberti, 1983; Bryman, 1988):

"quantitative and qualitative research may be perceived as different ways of examining the same research problem. By combining the two, the researcher's claims for the validity of his or her conclusions are enhanced if they can be shown to provide mutual confirmation" (Bryman, 1988:131)

Fortunately this thesis was not forced to face a situation where qualitative and quantitative data gave conflicting results. Any small inconsistencies were dealt with satisfactorily by simply further investigating that issue and the reasons for the discrepancies. Indeed qualitative and quantitative data were gathered in order to cross check the findings; the two research traditions being seen as complimentary with the strengths of one overcoming the weaknesses of the other.

Each method has its own strengths. Survey methods provide precisely detailed demographic data and the subjective state of the respondent such as their attitudes, values and beliefs.

They allow specific accurate comparisons to be made, often between two samples or groups, but in this thesis between one sample seven years apart. Interviews allow issues to be discussed privately and confidentially, encouraging responses which cannot be deduced from public behaviour. In addition, some things such as past events, context and experience are unobservable and can only be established by structured interviews (Bryman,1988).

Anthropological methods, with their emphasis on observation and discussion over a longer time period, allow the researcher to penetrate the thoughts of the respondent and discover why particular attitudes and beliefs are held, and to observe sometimes complex behaviour, social relationships and interactions in order to understand social processes (Wax,1971; Pottier,1993). Each methodology fills in the gaps the other cannot answer to provide a rounded portrayal of people's experience, and the context and influences acting on that experience. Both methods are necessary to allow all the relevant issues to be fully addressed.

This thesis does not see the two research methods as separate but each may contribute at different stages of the research process. For example the origin of the initial hypothesis and formulation of the research problem was a qualitative process. Likewise the establishing of categories or indices for quantitative analysis can be aided by qualitative research. While closed questions place answers in pre-determined standard categories, an integration of research methods can occur when categories for counting are established by using open questions which allow the respondents to determine the categories, not the researcher. Of course this can only happen if the researcher is able to put aside their assumptions and look only for patterns to emerge from the answers, allowing the voice of the respondents to be heard. This thesis has sought to do this as much as possible by the use of open questions and the application of a qualitative understanding of respondents' concepts and categories to research design. In addition such answers can alert the researcher to issues that require further exploration (Bryman,1988).

Quantitative research is usually oriented to specific concerns of the investigator, as it is here, and qualitative research often allows the expression of respondents' perspectives, again as it is here. However, this thesis, by using open questions which were later categorised according to the respondents' own implied categories, gathers probably half of its qualitative data within a research design conventionally associated with quantitative data. Here

structured interviews were used for the simultaneous collection and cross checking of quantitative and qualitative data.

The analysis and interpretation of quantitative data can also be facilitated by qualitative research in the interpretation of the relationship between variables. Quantitative data has strengths in revealing and establishing patterns, conformity, deviation and linkages between variables, while qualitative research can help explain the reasons for deviation and interpret the causal relationship between variables (Bryman,1988).

Surveys may produce a normative picture of how society ought to operate as people explain their beliefs and practices. Sometimes such perceptions may be misleading and may need to be tested by observation to see how and to what degree stated values and practices are acted out (Whyte and Alberti,1983). Qualitative research took on that role in this thesis as well, for example, in examining the contribution of cattle to *fa'alavelave*. Very few people are so self-aware that they are able to fully explain their behaviour, nor are they aware of contradictions in their behaviour between normative and actual behaviour. Thus, participant observation remains 'between the lines' in the interpretation of survey data.

But quantitative data may also influence the use of qualitative data. For example it may expose cases or sub-samples with known characteristics for more in-depth study. In this thesis cases used to illustrate a general finding, such as the impact of emigration, were identified in this way. Quantitative data can also be used to check qualitative 'insights' for representation.

The use of surveys combined with observation, meant that this research methodology was neither conventionally quantitative nor qualitative. It is more investigative, problem-solving and allows greater focus on change than conventional ethnography. Greater richness and interest in context can be sought using this methodology. It is more flexible which enables the respondents' lines of thinking to be followed more than by using conventional quantitative methods. Although the questionnaires used and shown in the appendices were completed, they often stimulated further discussion or life-stories, and copious ethnographic notes were simultaneously taken.

This integrative approach to research methodology, while not often used, does have precedent in researching rural development. For example Whyte and Alberti (1983) used an integrated combination of research methods (survey and ethnographic) in a study of social change in rural Peru in a situation not unlike that found in Samoa and with a perspective similar to that taken by this thesis. The study began within the framework of 'modernisation theory' in which the rural people were seen as tradition bound and resistant to change. However, this was abandoned as the researchers began to see the people as:

"men and women in motion in response to forces generated among themselves, as well as in response to external forces ... The focus of analysis [became] ... to look at the impact of and response to external forces" (Whyte and Alberti, 1983:299)

In what may be considered one of its major strengths, this thesis has also taken a longitudinal approach in order to measure and understand rural social change, and to test the passivity often ascribed to rural people, particularly by modernisation theorists. Only a time-based study can record whether social processes are operating in an active dynamic way. This contrasts with other research techniques which focus on present-time data and in comparison provide a static picture of the topic under study. The use of longitudinal studies also strengthens the increasing sensitivity to historically grounded variations and local experiences of development as researchers move away from demonstrating that development must conform to a pre-written script (Booth, 1994).

The use of longitudinal studies and a historical contextual approach to understanding rural change has many precedents in research in the Pacific. Examples include Ponter's (1984) study of co-operatives in Vanuatu, three studies of agricultural development in Fiji by Brookfield et al. (1985), Ward's (1995) study of land tenure and deforestation in Samoa, and, significantly for the purposes of this thesis, a study of the development of smallholder cattle industries in Melanesia by McKillop (1989).

The decision to study two different time periods meant that a considerable degree of standardisation using quantitative methods had to be imposed in order to ensure that the ability to make comparisons and contrasts was maximised.

1.4 In the Field

The collection of data had three components: questionnaire surveys, participant observation and the collection of secondary data.

Three surveys were conducted:

1. A survey of smallholder cattle farmers in Western Samoa in 1987 and in 1994.
2. A survey of cattle distribution and adoption in one village.
3. A survey of project managers and consultants, local and expatriate.

1. Survey of Smallholder Cattle Farmers

This survey, which is also referred to in this thesis as the general survey, was carried out in a series of stages. These are explained in Table 1.2.

Table 1.2: Stages in the Survey of Smallholder Cattle Farmers

Stage I	1987	63 respondents, out of a population of 85, were traced and measured
Stage II	1987	54 respondents from Stage I plus 5 new respondents were interviewed, totalling 59
Stage III	1994	58 respondents from Stage II were traced and 50 were interviewed
Stage IV	1994	36 respondents from Stage III were interviewed again

Stage I: In June 1987 I conducted a census survey of a population of approximately 85 smallholder cattle farmers from the island of Upolu who had received cattle from the Western Samoan Department of Agriculture, Forests and Fisheries (DAFF) Livestock Section between 1985 and 1987, as part of a project begun in 1985.⁴ This population of 85 was selected out of the larger population of all smallholder cattle farmers⁵ for four reasons:

1. It enabled a direct comparison with previous research by Parker (1980).⁶
2. It enabled farmers who had been cattle farmers but no longer were, to be identified.
3. There was no accurate record of the larger population and therefore no way to ensure a random selection.
4. The purpose of the research was to examine cattle farming within the context of a project or projects.

Sixty three farmers or farming groups were located, their progress with government project stock measured and some base-line data gathered, although farmers were not interviewed in depth at this stage. I spent several days travelling with DAFF Livestock Section extension officers throughout Upolu to do this and their help in locating farmers was critical in facilitating this research.

As an attempt was made to survey the total population of 85, the 63 respondents in Stage I were not randomly selected. It is also acknowledged that the population of 85 was not a random sample of all smallholder cattle farmers in Samoa because it only included those who received cattle from the government. Nevertheless this has been one of the main ways of obtaining cattle and access to the waiting list was open to all. Furthermore, data from this survey compare well with data from the 1989 Agricultural Census (Department of Statistics/Department of Agriculture,1990).

I am confident the sample is representative of smallholder cattle farmers. The data show, in fact, that a wide cross section of cattle farmers were interviewed, including widows and representatives of women's committees; *matai* and untitled men; young and old; primary educated and tertiary educated; modern and traditional; beginners as well as established cattle farmers. Also in 1994, in parallel with Stages III and IV, a village survey was used to sample other cattle farmers and non-cattle farmers to provide additional cross checking and to place this sample in context.

In Stage I actual progress with cattle received only from the government was recorded (i.e. not total herd) as I accompanied extension officers. Births, deaths and other losses were recorded. This enabled direct comparison with the results of an earlier project recorded by Parker (1980). The survey form is at Appendix 1.



Plate 1. Off to interview another respondent.



Plate 2. A respondent at home.

Stage II: A month after Stage I was completed I returned to interview in depth those 63 farmers who had been surveyed. However, even at Stage I, nine of these farmers, or their herds, were not able to be located by the extension agents (some had emigrated) and, having been counted in Stage I as having no cattle, they could not be considered respondents in Stage II. Fifty-four farmers from Stage I were interviewed in Stage II.

A further five respondents who had received cattle from previous projects were also included. Data collected from them were not directly related to the 1985 government project. They were not randomly selected but were included because they were all from the island of Savaii (not previously included) and included two farming groups, thus offering additional insight.

This made a total sample size for Stage II of 59. The questionnaire is at Appendix 2. At this point 54 had cattle while 5 no longer had cattle.

Stage III: In May and June of 1994, seven years later, I returned to locate and interview the 59 respondents from Stage II to find out what changes had or had not occurred over the intervening period and why, and to investigate other issues.

Research design for Stages III and IV, as well as the village survey and management survey was determined by three factors:

1. The design of the Stages I and II surveys which provided the 'then' baseline data and so determined what 'now' data were needed in Stage III for effective comparison. This included, for example, data on herd sizes and contributions to *fa'alavelave*.
2. Issues which were brought to light by an analysis of Stages I and II survey data, by a literature review and an evaluation of projects using secondary data. This included, for example, asking farmers how they coped with wild cattle, an issue that became apparent from analysis of the results of Stage II (Maiava, 1993). Questions about the selection of animals for *fa'alavelave* were designed to test the assumptions found in project documents.
3. A review of research design and evaluation methodologies.

It was possible to locate and interview 50 respondents in Stage III. Of the nine non-respondents, six had emigrated, one could not be found, one declined to respond and one was deleted for being too large and commercial. Of the 50 respondents, 41 had cattle and were interviewed using Questionnaire 1 (Appendix 3). This included one farmer who had started again since 1987. Five farmers or groups who did not have cattle any longer were interviewed using Questionnaire 2A (Appendix 4). Four farmers or groups who still had no cattle since 1987 were interviewed using Questionnaire 2B (Appendix 5)

Stage IV: Of the 41 farmers who had cattle in Stage III, 36 were interviewed a second time. Stage IV consisted of three separate Questionnaires: 1B, 1C and 1D. 1B involved questions about the social and cultural impact of cattle, 1C had questions on cattle in the farming system, and 1D had questions on the farmer's experience with cattle projects. They are at Appendices 6, 7, and 8 respectively.

Originally an interpenetrating survey at this stage was intended (Dixon and Leach, 1984). That is, one third of respondents would receive questionnaires 1B and 1C, one third 1C and 1D, and one third 1B and 1D, on a random basis. This would enable correlation across two thirds of respondents for any particular set of variables, increasing the statistical confidence of the results.

However, it soon became apparent that this was not feasible in the field even though it was academically desirable. Where I was interviewing in English it took more than an hour to administer two questionnaires, and much longer when interviewing in Samoan. It was a dilemma. Respondents began to tire, not just because of the length but because this was my second visit and they could not see why I needed all this extra information. For my part, I could not significantly reduce the length of the questionnaires without losing quality and depth. Thus I decided to interview using only either questionnaire 1B or 1C or 1D for the second interview. I was confident that all the data that would need to be cross-correlated was included in Stage III. Where two questionnaires were completed, they have been included. The sample size for 1B is 12, 1C is 13 and 1D is 11.

Designing the Questionnaires

Questions in the questionnaire to farmers were designed to measure both objective factual reality and subjective perceptions and attitudes; to measure both perceived and actual behaviour. They included both open and closed questions. Closed questions reflected what I thought I wanted to know and open questions allowed farmers to tell me things I needed to know but never thought of asking because of the limits of my own cultural perceptions and values (Dixon and Leach, 1984; Casley and Lury, 1987).

But even open questions, it became apparent, still reflected my own cultural biases and expectations. For example, open questions about goals or plans reflect my own expectation that people have goals and do plan ahead. This does not have the same meaning in a culture in which people tend to plan in a more general sense for the unexpected, compared to a culture in which people tend to plan with a greater sense of control of the future. In Samoa a goal for the future might be to be able to support the family in any need that may arise, something of an unsatisfactory answer to someone who is looking for more concrete answers. But in fact this is a perfectly satisfactory answer because it reflects the thinking of the person who is answering the question.

Care was taken to avoid leading questions. For example, farmers were asked what animals they chose to kill for *fa'alavelave*, rather than 'did they kill heifers?'. Of course this is not a measure of actual behaviour but of perceived behaviour, or perhaps of knowledge of expected behaviour in this case. As over 75% of respondents told me they chose bulls or old barren cows, and many spontaneously added that they avoided or refused to kill cows, conclusions can be drawn with confidence. In addition I cross checked this about 10 minutes later in the interview by asking which animals were killed for the most recent *fa'alavelave*. This is a more accurate measure of actual behaviour. There was some, but surprisingly little, discrepancy.

Asking questions of recent past behaviour is a more accurate measure of actual behaviour than asking people to describe their behaviour (Bulmer and Warwick, 1983a). For example, I asked what farmers did to care for their cattle in the past week rather than what they did to care for their cattle. Nevertheless, I was very much measuring perception in most of my

questions. Questions about the impact of cattle on village life and social relations were particularly of this nature.

Translating and interpreting were done by different people in 1987 and 1994. Thus in 1987 cattle was translated in the questionnaires as *lafumanu papalagi* and in 1994 as *manu papalagi* (plural) or *manu palagi* (singular). These are both formal translations as both insisted on formal 'official' translations. The translator/interpreters took great care to understand and translate the meaning of the questions accurately. For example, heifer had to be translated as "*manu palagi ta'anoa*" (meaning young cow that hasn't had a calf yet), breeding cow as "*aumatua manu palagi fanafanau*" (mature cow that can have calves) and old cow as "*aumatua manu palagi ua le toe fanau*" (mature cow that can no longer have calves). The translation was checked by having the question re-translated back into English (Dixon and Leach, 1984).

Having done the formal translation, however, both interpreters relaxed into the more colloquial '*povi*' for cattle and used more familiar language during the interviews, using *povi ta'anoa* for heifer, *povi fanau* for breeding cow and *povi tiiale* for old cow. Thus the interviews were not nearly as formal as might appear from a study of the 'official' questionnaires at Appendices 1-11.

During interviews only the question was asked and alternative responses were never suggested. The interpreter asked each question in Samoan and immediately translated the response into English. The interpreter and I quickly learnt to work as a team and developed a sort of shorthand so the translating did not interrupt the flow of the interview. The translation into English throughout the interview enabled me to communicate almost directly with the respondent and follow his thoughts and feelings. For many responses no translation was necessary.

As I recorded the responses I determined which category they fell into or simply noted a response for later categorisation. Thus during analysis some categories disappeared while new ones were formed if answers to a particular question bore no resemblance to those anticipated by the questionnaire. Questionnaires ended up with notes all over them, especially if 'mini case studies' or stories of 'lived experience' emerged during interviews as farmers told their stories (Deekerman, 1994).

I was always vulnerable to exaggeration or deception. I was always reliant on assuming that I was being told the truth, something all researchers in Samoa are particularly wary of following in the steps of Margaret Mead (Freeman,1984). Researchers are fair game for tricking; farmers are liable to boast and try to make a good impression on someone they perceive as having at least something to do with the government, despite my denials. In addition, customary politeness can lead to respondents telling interviewers what they think they want to hear. Respondents may also have been casual in their answers, failing to understand the degree of accuracy I was trying to achieve.

However, because of my cross-cultural experience in Samoa, the cultural knowledge and awareness of my interpreter, and the use of questions designed to cross check each other, I was confident that I was not seriously duped. For example, if I was told in 1987 that the herd size was 15, it may well have been 12. If the same farmer told me in 1994 that his herd size was 30, it may well have been 25. Assuming the same degree of exaggeration (because of the high status of cattle) in both interviews I could still safely conclude that in the intervening years his herd size had doubled.

2. Village Survey and Participant Observation

The village survey in the village of Sato'alepai in Savai'i was conducted in order to place the general survey in context. In the general survey of farmers only one or two farmers in a village were surveyed and nothing was learned about the distribution of cattle in a village nor the attitudes of, nor impact on, non-cattle farmers, nor of the social relations between cattle and non-cattle farmers. However, only one village survey was completed so it is not indicative of all villages but rather is a case study. A census survey of Sato'alepai was conducted, surveying all 24 households. This village was chosen because of access to it via my own place in the village (which I do not believe biased the results) and because I was able to do it during the time I was in the village to attend and observe a funeral. The two questionnaires for this survey (households that had and did not have cattle) are at Appendices 9 and 10.

It was mainly in the village that I practised the participant-observation component of this research, although I also observed cattle farming practices as I travelled around Upolu for the general survey. In Sato'alepai I made an in-depth study of a funeral of a senior *matai* of

the village. This included the decision making and preparation for the funeral, and the involvement of cattle in this ritual. The village also provided me with willing informants with whom I could clarify issues that had arisen from the general survey. Villagers were happy to let me trail after them, note book, camera or video camera in hand, as they tended their cattle or slaughtered and butchered them. I was also able to organise a group discussion with a small number of cattle farmers and members of the village association. Some of the questions from the general survey were used to guide the discussion.

3. Survey of Project Managers, Consultants and Personnel and the Collection of Secondary Data

The purpose of this survey was to provide an alternative perspective of the project-people interface, to give 'the other side of the story' and to add balance to the thesis. Secondary data was also collected for this purpose and to provide the context of this thesis.

This survey was a census survey. All senior technical, management and consultant staff who I was aware of, who had been or were associated with cattle projects in Samoa in 1994, and in recent years were contacted. This was done, for example, by contacting people who had written project documents such as appraisals, evaluations or recommendations as well as staff currently working in Samoa in 1994 including nationals as well as expatriates. Organisations which the respondents worked for included development agencies such as AIDAB, UNDP, FAO, consultancies such as Lincoln International and GRM International, as well as DAFF Livestock Section and USP Alafua.⁷

Unfortunately, many of these potential respondents felt threatened, despite my attempts at reassurance. In Samoa questionnaires were left to be filled in and returned. Questionnaires were posted to previous consultants in New Zealand and Australia. However, only seven out of 15 were satisfactorily completed. Two were returned uncompleted. Despite faxes the other six never responded. Consequently the results of this survey are not specifically included in this thesis. However, some of the seven responses were very helpful and contribute 'between the lines'. This questionnaire is at Appendix 11.

Other personnel in Samoa were very responsive. A number of very helpful discussions were held with senior members of the Livestock Section staff and others in Samoa including the

then Minister of Agriculture, the Director of Agriculture, the Professor of Agriculture at USP Alafua, and FAO/UNDP personnel.⁸ Many of these respondents were also helpful in providing secondary literature in the form of agricultural reports and surveys and cattle project reviews, evaluations, proposals and implementation documents. Other sources in Apia included the DAFF library, the USP Alafua library, the Australian High Commission library, the WS Department of Statistics and, in Wellington, the MFAT library. I was also given access to FAO files in Apia and attended a GRM International pasture improvement training workshop held at Avele.

The data I sought were documents relating to cattle projects in Samoa, both local and international in origin. These documents, usually project-focused and short-term in nature, are often referred to as 'grey literature' and seldom reach public or academic libraries. They are often confidential and whether I was granted access to them, or even knew of their existence, was quite a random process. A satisfactory but incomplete collection was acquired and extensive use of these documents is made in Chapter 7.

This chapter has established the central purpose and objectives of this thesis and the research methodology necessary to achieve these. The results of the surveys and observations will be analysed in Chapters 5, 6 and 7. However, the theoretical, political and cultural contexts within which they must be interpreted must first be established. Chapter 2 begins this by establishing the theoretical context.

¹ *Fa'alavelave* are defined and examined in detail in Chapters 4 and 5. Samoan words are shown in italics throughout this thesis and are defined in the Glossary.

² Evidence to support the existence of these views is provided in Chapter 3.

³ Again, evidence is provided in Chapter 3.

⁴ Cattle projects in Samoa are described in Chapter 7.

⁵ About 2,200 households kept cattle in 1989 (Department of Statistics/Department of Agriculture, 1990:35).

⁶ The results of this research are compared with the research by Parker (1980) in Chapter 7.

⁷ See Acronyms and Abbreviations for full names.

⁸ See Acknowledgements.

Chapter Two

Establishing the Theoretical Context: Culture and Development

2.1 Introduction

This chapter introduces the theoretical context in which this thesis is set, and the major themes which run throughout. The first theme is the tenets of the major paradigms of development which influence development thinking and practice in the 1990s. These will include modernisation; liberal modernisation;¹ the third paradigm including people-centred development and populism; and the MIRAB theory of development. The first three are universal theories while the last is currently peculiar to the Pacific region. Their characteristics, similarities and differences are compared and contrasted in order to establish the background setting to this research. Where relevant, the influence of ideas with Marxist and neo-Marxist origins is also discussed.

These broad theories, each based on a set of assumptions, provide a framework for analysing the causes and nature of under-development. Each gives an interpretation of observations, and according to their own rationale for intervention, a set of prescriptions for action. One development case study: smallholder cattle farming in Samoa will be used to investigate the validity and usefulness of each theory. What would each identify as 'the problem' and prescribe or recommend? How would each interpret and account for the research observations? Which would give the most realistic explanation for the findings of this research? In what ways could the findings re-inform theory or direct the generation of new theory? These questions are addressed in Chapter 8.

The second major theme is the role of culture in development. The meaning of culture is examined in Chapter 4 but here we are interested in perceptions of culture in theory, as well

as the cultural origins of the theories of development. How have the major theories of development portrayed culture? Is it seen as a constraint or a motivation? How has their portrayal of culture influenced development in practice? What do observations suggest about the role of culture in development and how does this compare with the theories?

The third major theme is the way in which theories, particularly modernisation, translate into practice, in the project cycle and a top-down style of implementation, and the discrepancies that occur between predicted, planned and actual outcomes. The particular prescriptions of interest are in the areas of project design and implementation, and the development and transfer of technology. In this thesis cattle are considered a new technology.

The fourth major theme is the role of social information and research in the process of translating theory into practice, the anthropological perspective, and again how these are viewed differently by the modernisation and the 'people-centred' perspectives.

The fifth major theme is that development is a process of cultural interaction, both at the level of assumptions made by theory, and also, of more interest, in practice at project level. The project process has formed its own subculture. The project-people interface is therefore a cultural interface. Development is a process of reaction and response to development stimuli and opportunities, real or perceived. This, then, involves cross-cultural interpretation by both parties, the results of which may be unpredictable.

2.2. Modernisation

In his inaugural speech as President in 1945, Truman said:

"We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas ... What we envisage is a program of development" (Truman, 1945)

In examining the cultural origins of modernisation theory it may be argued that it was broadly based on three ethnocentric Western cultural concepts: economism; a belief in the superiority of Western culture, values and technology; and the concept of social evolution.

According to van Nieuwenhuijze (1986) the Western world view is essentially 'economistic':

"a world view according to which man as the subject deals with the reality surrounding him in a subject-object relationship: more precisely in such a way that maximal returns are drawn from systematic effort. The resulting lifestyle is economistic" (van Nieuwenhuijze, 1986:97)

The result was a paradigm of development that was overly economic, materialistic, technological, problem-solving and return maximising, and that considered social concerns as being of separate and secondary importance. It was culture specific: economic rationality is a Western cultural value.

The basic assumption that the economy should be the basis of society carries with it a series of logical deductions that were also incorporated into development theory. For example, it follows that standard of living is more important than lifestyle, all production decisions should be made with the aim of maximising economic return, big is beautiful because of economies of scale, unemployment may be necessary for progress if it is necessary for greater economic return, and individualism and entrepreneurship are good because they produce greater economic return.

Although these components of theory are, then, culturally determined, the modernisation paradigm and its chronological successor liberal modernisation² were implemented with the assumption that they were culture free and culture neutral in the host country. The failure to recognize Western lifestyle and concepts as culture specific has caused major misunderstanding of Third World cultures. As with other cultures, Westerners learn their culture as part of their socialisation and experience and it becomes so ingrained as to be completely unrecognised and unquestioned.

The assumption of cultural superiority inherent in modernisation theory originated in the concept of social evolution (social Darwinism) (Abercrombie et al., 1988:226), the 'obvious'

advancement of Western technology and possibly simply cultural prejudice. With it came the inferior status attributed to local cultures. Logically, cultural 'deficiencies' and traditionalism were blamed for underdevelopment, therefore these irrational beliefs and behaviour had to be unlearned and replaced by Western values. The solution was the dissemination and diffusion of Western ideas and ideals (Hoselitz, 1963; Harrison, 1988).

Parsons (1951) identified the fundamentally different characteristics or pattern variables that established the central dichotomy within modernisation theory. Parsons stated, for example, that traditional economic roles were determined by ascription (social position), were particularistic (only certain people were eligible) and were functionally diffuse (with multiple unspecialised activities), while modern economic roles were determined by achievement (ability), were universal (any qualified person is eligible) and functionally specific (specialised). In addition traditional cultures were family orientated and thus inward looking and resistant to change while modern societies were not constrained by family ties, were outward looking and freer to change (Hoselitz, 1963).

In addition to the specific characteristics, what Parsons was essentially emphasising was a sharp and total dichotomy between what was traditional and what was modern. In modernisation theory the two are seen as absolutely incompatible. The origins of this idea can be traced to Durkheim and other early sociologists who observed the interdependence of the various components of society. This became the concept of functionalism, developed largely by Parsons (1951), in which all the components of society (the economy, political system, social structure, culture, values and technology) were seen as interacting harmoniously to stabilise society in a systemic way – hence 'social system' (Parsons, 1951).

All the components of a society were seen as a total package. To alter one component was to alter the whole system and to change the system all the components had to change. Because traditional cultural values could not be conceived as being compatible with modern technologies and economies, the modernisation paradigm required not only economic and technical change but also changes in the way of life, mode of production, social relations and value systems as both prerequisites for and consequences of development. Values were to be reoriented to achieve economic rationality and profit maximisation (Hoselitz, 1963; Hoogvelt, 1978).

Modernisation theory undermined many traditional institutions including family orientated work patterns, social interdependence and the diversifying of risk, as well as values associated with ascription, obligation and identity. One was the custom of reciprocity. Reciprocity means not only that no-one suffers but also that it is difficult to accumulate for investment for future return. However, re-investment of surplus was fundamental to modernisation and capitalism which places higher value on the future than the present, even to the point of sacrificing the present. In contrast, many traditional societies tend to place more value on the present, and invest in the future socially rather than economically. In fact, reciprocity, which results in a long-term trend towards equivalence in traditional societies, and social status gained by generous giving, provides a very important incentive to produce which is little recognized. Production and activity are affectively rewarding, particularly by family and community approval (Hoogvelt, 1978).

Western productive activity, on the other hand is affectively neutral. Wages must be converted into something else in order to provide an affective reward. This requires a consumer market so that 'happiness' can be achieved by converting wages into material goods. In many traditional societies money is transferred to the family where again family approval is the reward. Conversely, it can be argued that consumerism threatens extended family ties, reducing dependence on kinship for security.

By logical deduction within modernisation theory, it followed that concepts of entrepreneurship and free competition required the mobility of land, labour and capital which required the transferability of property rights which in turn required discrete and individualistic concepts of ownership of land, property and one's own labour, in order that each could be bought and sold. Resulting policy, then, often encouraged individual ownership, especially of land. Communal ownership, traditional labour obligations and affection for the land were undermined (Hoogvelt, 1978).

Not only was the individual to be the economic unit rather than the family or community in modernisation theory but also capitalism actually required the stratification of society into classes in order to operate, namely those who own the means of production and those who have only their labour to sell. In this way equality was negatively valued. In fact, capitalism, in valuing economic achievement, seems to appeal to values of individual greed, or at least the selfish element of human nature.

This discussion illustrates that economic activity cannot be separated from cultural concepts, values and norms as is argued by functionalists. Traditional economic systems cannot be expected to change to 'modern' ones without undermining traditional value systems and therefore cultural identity. Intervention in one area of a society will reverberate into other areas, but it does not follow that such secondary changes must be made to happen simultaneously, as the total package approach of modernisation theory argued, or that they are necessarily desirable or predictable.

What is most apparent is the huge dichotomy between 'traditional' cultures and 'modern' behaviour depicted in modernisation theory. In this theory traditional cultures were to be totally changed in a process that recreated the modern industrial capitalist world. Even the word 'traditional' could be given a political meaning and used to imply inflexible out-datedness. At the beginning of the modernisation era, however, indigenous cultures were not universally condemned. Epstein wrote:

"there are in fact many 'customary' values and institutions which, rather than hamper change, provide fertile ground for the development process to take root" (Epstein, 1972:241)

And Hoselitz conceded:

"traditions may have positive as well as negative effects ... we must ... study the aspects of tradition that conduce to economic and technological progress [sic], and of the aspects that may impede such progress" (Hoselitz, 1963:15)

Tradition could provide stability during rapid change for example, mitigating the effects of social dislocation (Hoselitz, 1963). Nevertheless modern 'rational' capitalist industrial development was still seen as the goal.

Modernisation theory guided much research. Observed reluctance to adopt Western behaviour was explained by saying other cultures were 'irrational', bound by 'little tradition', 'amoral familism' or 'the image of limited good' (Foster, 1965). Villagers were portrayed as conservative and passive. But social scientists also observed the changes that were supposed

to be happening in the study of 'social change'. An early example is that of Lerner (1958) in a work entitled 'The passing of traditional society'.

In the Pacific too, modernisation theory determined the expectation of specific forms of social change by observers (individualism, urbanisation, entrepreneurial activity and so on) and the obstacles traditional cultures presented to modernisation. Watters, in his study of social change in Fiji (Watters, 1969) set out to:

"determine the extent to which they are committed to Western culture ... [for it is] in the villages themselves, where the response to the prospects of change can be noted and the main impediments to modernisation described" (Watters, 1969:xiii)

Of Watters' work, McKinnon and Morrison said:

"Here the broad themes of diffusion and modernisation [were] stated without apology ... The wisdom of the time based on Rogers' diffusionist model held that it was [those] willing to break away from the strictures of traditional society who pioneered paths to development and modernisation ... the greater part of Koro remains as a valuable record of the times" (McKinnon and Morrison, 1995:7,8)

Modernisation theory was also widely put into practice, especially in the application of Western technology, production and management systems. One of the features of modernisation was 'modern' agriculture based on Western practices of monocropping and large 'efficient' plantations. In the Pacific the large commercial 'plantation' mode of production was strongly favoured over the 'mixed subsistence-cash cropping' (or smallholder) mode of production as being more efficient and productive, increasing incomes and providing the most promising basis for 'progress' (Ward and Proctor, 1980:104,106,243; Sevele, 1980, 1983; Hardaker et al., 1984a).

Yen (1980) defined the 'plantation' mode of production in the Pacific as:

"[a] large-scale mode of production [which] is characterized by foreign capital (and often, ownership), expatriate and centralized management, land alienation, wage employment of labour, and export of virtually the total production" (Yen, 1980:74)

This describes the WESTEC³ plantations in Samoa although they are government owned and do not export beef. Government involvement in such large scale ventures may seem contradictory to the laissez-faire policies of classical economics. However, although modernisation theory mainly encompassed the philosophies of free-market, free-trade capitalism, ironically the justification for intervention via development projects was provided by Keynesian economics.

This model rejected the hands-off approach of classical economics and argued that the state should intervene in the economy in order to stimulate development and provide social progress (Overton, 1997a:12). Although a model of capitalist economic growth, this principle had indirect Marxist origins; Keynesian economists were democratic socialists. In the Third World, industry, the level of domestic savings and investment were all seen as insufficient to support capitalist development. This resulted in aid being directed through governments into infrastructure, communications and other large government projects. Hence cattle projects in Samoa, as will be seen in Chapter 7, have been the domain of the Samoan government.

The second consequence of the influence of Marxist thinking (in the form of neo-Marxist dependency theory) and Keynesian economics on modernisation theory was that it became widely assumed that dependency was to be avoided and self-sufficiency was a desirable policy goal (Overton, 1997a:34). This policy has been widely implemented in the Pacific although the reasoning behind it had been questioned (Bertram, 1993) and will be analysed further in Section 2.5. The goal of self-sufficiency has been used to recommend and justify cattle projects in Samoa (e.g. Ward and Proctor, 1980; AIDAB, 1987) as well as many other agricultural projects.

Modernisation has mellowed in its stated expectations of cultural change. However, its latent force remains in development institutions, in the "neoclassical counterrevolution" (Todaro, 1994:85) (the resurgence of neo-liberalism), in its expectations of capitalist economic behaviour and the changes which that requires. Although much social and economic change has occurred along the lines predicted, modernisation did not bring about the development that was envisaged and later came to be seen as having a negative impact on the people it was supposed to benefit (Thaman, 1993:A4.1). New thinking and other models were required.

2.3 The Beginning of an Anti-Thesis: Liberal Modernisation

The use of the term 'liberal' in this context has been chosen to indicate the subtle shift whereby the liberty of people rather than economies came to be seen as the focus of development, but still within the context of state intervention. This is borrowed from the concepts of liberalism and liberal democracy:

"Liberal democracy involved a new conception of the relationship between the individual and the State: the individual was now a citizen with rights, not just a subject with duties (p257) ... [It] promised liberty in the form of political and civil rights ... and added to them a measure of redistribution of wealth which caters for the needs of the least privileged (p341)" (Worsley, 1984)

Liberal modernisation grew out of the theory of modernisation when it came to be realised that development, strictly defined as economic growth, was not having an impact on reducing poverty. 'Trickle-down' was not working. At that time, in the early 1970s, the American economy began to falter and, with the oil crisis, move into debt. Together with the mounting unease over American involvement in the Vietnam war, it began to appear for the first time that the American model of development might not be infallible.

In the early 1970s thinking in development moved in three directions: towards liberal modernisation; to a neo-Marxist critique of capitalist development by South American socialists which became known as dependency theory (a theory of underdevelopment rather than a theory of development); and to a bottom-up, people-centred approach to development, the father of which was another South American: Paulo Freire. It is the first and last of these

which are the main concern of this thesis while the influence of ideas originating from Marxism is also acknowledged.

Dudley Seers, in 1969, was probably the first of a group of liberal economists to suggest that development as economic growth was not working as such and that the criteria for measuring development should be broadened to include poverty, unemployment and inequality (Todaro, 1994:15). Robert McNamara, brutalised from his experience overseeing the Vietnam War effort, left politics to become the President of the World Bank. In a landmark annual presidential addresses to the World Bank in 1972 and again in 1973 he expressed concern for the 'poverty of the poorest 40 percent of the citizenry' (Porter et. al., 1991:32). The International Labour Organisation was another that led the move to find a better way. What was different was concern with the distribution of the benefits of development, equity, the plight of the poor, and poverty alleviation.

"The popularity among development agencies of the new language of development, 'basic needs, 'growth with redistribution, social sector lending', was heralded as reflecting major changes in thinking (p96-97) ... [However] behind this shift in focus was a political rationale critics termed 'defensive modernisation' ... which signalled efforts to pre-empt the build-up of social and political pressures in rural areas by incorporating marginalized people more fully into development (p96)" (Porter et al., 1991)

So was born liberal modernisation, a move to widen the distribution of the benefits of development by moving to meet 'basic needs' (Streeten, 1981). The call was for 'redistribution with growth' (Todaro, 1994:15). Economic growth was not in any sense abandoned as a goal of development but more attention was to be paid to seeing that the benefits of that growth were more equitably spread. By doing so more people would be able to participate in capitalist development.

In a sense it was recognised that equity was a necessary ingredient of economic growth rather than an outcome as had been thought previously. Education and health programmes moved to community level in order to reach more people. There were other ingredients too: land reform, rural development (modernisation had favoured urban development and rural neglect (Lipton, 1977)), 'appropriate technology' (Dunn, 1979), agricultural extension

programmes and 'integrated rural development' (in which provision of services, inputs and infrastructure was 'integrated' for one export crop (Porter, 1991:30)). There was a change in emphasis from shifting people into the prosperous modern sector to helping them increase their incomes right where they were in the smallholder sector, in their regular activities.

This gave smallholders new credibility. More recently, smallholders have been seen as 'rational', 'risk averters', 'optimizers' and even 'profit-maximizers' (Ellis, 1988), willing and able to manipulate and exploit external opportunities, given the possibility to do so. Liberal modernisationists rejected the assumption that large-scale, mechanised agriculture was necessary for agricultural development, and adopted the idea that the small farm could be an efficient and equitable basis for rural development. Agricultural development was broadened to rural development, and the historical model moved to the success stories of Japan, Korea and Taiwan (Korten, 1990).

"Some central assumptions of the 'new orthodoxy'[were]:

(a) that small-scale family farms are as efficient as or even more efficient than large farms; (b) that peasants are highly responsive to market incentives, provided they get access to markets; (c) that peasant agriculture is more labour-absorbing than other kinds of production organization; (d) that peasant agriculture gives a more equitable income distribution and thus alleviates poverty; (e) that the role of the state in agriculture has largely been negative" (Jonsson et al., 1991:65)

In the Pacific this argument was taken up by, for example, Hardaker, Fleming and Harris (1984a) in a critique of the assumption that commercial plantations were more efficient and the route to 'progress' as proposed by Ward and Proctor (1980, cited above) and Sevele (1980, 1983). Hardaker et al. argued:

"The evidence presented in [Ward and Proctor] on which these statements are founded seems very scant and far from conclusive ... [including] some anecdotal evidence ... It is a matter for concern that these very strong policy recommendations from the prestigious Asian Development Bank, which have

such potentially far-reaching implications, appear to have been based on little empirical evidence" (Hardaker et al., 1984a:197,198)⁴

The agricultural mode of production commonly found in the Pacific is the 'mixed subsistence-cash cropping system' (Yen, 1980) which is the focus of this thesis and includes the smallholders of Western Samoa. This mode of production may be defined as:

"mixed subsistence-cash cropping systems widespread in the region ... smallholder systems, often involving a degree of specialisation in the production of a particular cash crop, frequently for export ... as well as local staples ... livestock production and fishing are also sometimes integrated into this mode of production" (Hardaker et al., 1984a:196)

Hardaker et al. (1984a), argued that the 'smallholder mode of production' in the Pacific was at least as efficient as the 'plantation' or commercial mode of production and probably more socially desirable in terms of both income distribution and cultural tradition. If smallholding yields are below those of plantations, they argued, it is because historically resources (the better land, expatriate knowledge, agricultural research, technology and economic incentives) have been directed into the plantation mode, and not because of any intrinsic fault in the smallholder mode. Furthermore they pointed to some advantages smallholder systems have in terms of 'the incentive of family workers', the ability to withdraw from and re-enter the market, and the use of labour instead of capital which is consistent with 'the common development goal of generating employment opportunities in rural areas'.⁵

The division between Ward and Proctor, and Hardaker et al., which continued in heated debate (Ward, 1984; Hardaker et al., 1984b) illustrates one of the central dichotomies between modernisation and liberal modernisation. It also introduces the emerging idea that smallholders are not passive but responsive, innovative and active.

One of the most important contributions by anthropologists to development has been confronting the ethnocentric assumptions of the modernisation paradigm. In-depth anthropological microstudies have revealed complex organisation, behaviour and thought among traditional communities. Anthropologists have shown that behaviour is often based on pragmatic choice and reducing risk as much as tradition, that traditional institutions can be flexible and adaptive (Pitt, 1970), that farmers experiment and innovate (Hoben, 1982;

Richards, 1985) and that small-scale farming systems are sensitively adjusted to local ecological, economic and political conditions and their fluctuations (Bartlett, 1980).

But anthropologists have also confronted the more recent 'rational peasant' variations of the liberal modernisation paradigm which portrays the peasant as an economic maximizer constrained only by his/her access to factors of production and markets and by risk (Ellis, 1988). They have shown that other exogenous factors: obligation, the extended family, community and local and wider political and economic linkages, are also important (Hill, 1986). Whatever the conclusions of this particular debate, attention was drawn to the persistence of traditional rural modes of production as it became clear that these had not capitulated under capitalism in the form of modernisation as modernisation theory had predicted.

Although the Marxist perspective is not addressed specifically in this thesis, it is worth noting that Marx also predicted that traditional cultures would disappear as history progressed and each mode of production was completely subsumed by the next. As capitalism caused increasing social differentiation, the peasantry would be absorbed into either the bourgeoisie as capitalist farmers or the proletariat as wage labourers. Because Marxism has only ever seen one problem (class-based exploitation by the rich of the dispossessed poor) and only one answer (class struggle) it has never been able to account for the persistence of traditional cultures or peasant societies except to simply label them as pre-capitalist, and thereafter ignore them. The major contribution of Marxism, however, has been to thrust 'ordinary people' into the centre-stage of history and to recognise the social nature of all productive activity. It also removes the blame for underdevelopment from local beliefs, attitudes and culture.

Despite predictions of its disappearance, there is no question that rural smallholder family-based enterprise has persisted under capitalism and decades of modernisation. One explanation is offered by articulation of modes of production theory which is a re-interpretation of Marxist theory. In this theory social formations or societies contain more than one mode of production (Althusser, 1970):

"the concept of articulation refers to this 'coexistence' of different modes of production which, rather than being separate from each other, interrelate to form a complex whole characterised by the domination of one of the constituent modes of production over the others" (Ponter, nd:21 quoting Althusser, 1970)

In Samoa the dominant mode would be the capitalist mode to which the subsistence mode of production is subordinated. In this theory the dominant mode allows the dominated mode to continue to survive in modified form in order to exploit it and extract economic surplus (Taylor, 1979; Worsley, 1984). For example by introducing waged labour but not paying all the costs of the maintenance and reproduction of labour (where basic needs are still met by subsistence production), those unpaid costs are essentially extracted as surplus.

However, peasant studies have also identified other more practical explanations for the persistence of the subsistence mode of production, based on the work of Chayanov (1925). Smallholders have been able to survive largely because of their ability to disengage from the market and be self-reliant, producing only for subsistence during hard times. Other survival tactics include reciprocity, and 'self-exploitation' where farmers work long hard hours for reducing marginal returns, thus enabling the subsistence economy to remain competitive with the capitalist economy (Kerblay, 1971; Harrison, 1982; Ellis, 1988). Flexible farming systems with mixed and multi-cropping, the mixing of farm and off-farm incomes and the emigration of family members who send back remittances all preserve and subsidise village life.

But while villagers as a whole have not been forced to sell out and become wage labourers, (although this has happened in many places), they have also not become capitalists. The reason for this, Chayanov argued, is because they have a completely different economic rationale: the motivation of 'simple reproduction', that is, the provision of subsistence needs for the household, rather than profit maximisation (Chayanov, 1925:1-5). This may be referred to as the "moral economy" (Scott, 1976; Brass, 1991:178).

Other factors include the limits of the household cycle, particularly labour shortages and the obligation to support unproductive family members at various stages of the cycle, the division of land due to inheritance patterns and population pressure, the removal or appropriation of surpluses via rents, usury and price squeezes, the high risks and fluctuating

income of selling on agricultural commodity markets, wider family and community obligations (so called 'amoral familism') and reciprocity. All these things prevent stable incomes, profit and the permanent accumulation necessary for entry into capitalism (Hoogvett, 1978; Worsley, 1984).

These ideas from articulation of modes of production theory and peasant studies contributed to the development of liberal modernisation which, in turn, facilitated increased awareness of the role of smallholders and villages of the Third World in development and their responses to development interventions. It sought not to do away with traditional culture but to incorporate it, through farming systems research, for example, so that development could be more effective. However, liberal modernisation was still a model of transfer of Western knowledge and technology, as was modernisation, but with more thought about how this was to be most appropriately achieved. It was the West that still had the answers and the ultimate goal remained unchanged. Liberal modernisation was still a model of 'helping' but more appropriately and with greater sensitivity.

Liberal modernisation itself developed throughout the 1970s and 1980s. Many later definitions of development would include references to participation and people-centred development and would resemble the third paradigm discussed below. But the essential difference is that liberal modernisation, like modernisation, remains a top-down interventionist, 'West knows best' approach that does not allow for any other definitions or models of development, and consistently sees Third World citizens as passive recipients of better ideas and as the ones who must change their behaviour and adopt new behaviours in order to benefit from development.

Liberal modernisation also adopted the concept of sustainable development. Meadows et al. (1992) encapsulate the liberal modernisation approach:

"A sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support ... A sustainable society would be interested in qualitative development, not physical expansion ... It would be neither for nor against growth, rather it would begin to discriminate kinds of growth and purposes for growth" (Meadows et al., 1992:209,210)

Modernisation, resurrected as neo-classical economics, lays the blame for environmental degradation or lack of sustainability with poverty, and argues for increased economic growth via free trade. But liberal modernisation, in contrast, lays the blame with inappropriate economic growth, Western consumption or poorly designed development projects, and calls for modifications to development practice. It could be argued that ecologically sustainable development, the development 'model' of the 1990s, is a reconditioned version of liberal modernisation. It is reformist rather than radical. It is a Western answer to why significant development failed to occur in the 1980s.

"the phrase 'sustainable development' is attractive to development agencies and theorists looking for new labels for liberal and participatory approaches to development planning. Development bureaucrats and politicians have undoubtedly welcomed the opportunity to fasten onto a phrase that suggests radical reform without actually specifying what needs to change or requiring specific action ... [it is] acceptable ... precisely because it does not demand radical change of policy direction" (Adams, 1990:4)

Sustainable development can simply be the appropriation of ideas and concepts from development studies by conservationists in order to achieve environmental objectives:

"environmentalists have attempted to capture some of the vision and rhetoric of development debates. Sadly they often have no understanding of their context or complexity. Environmentalist prescriptions for development, shorn of any explicit treatment of political economy, can have a disturbing naïvety" (Adams, 1990:3)

In development studies it can be argued that sustainable development should be more than ecologically sustainable development as it is usually portrayed because such a narrow focus allows other issues to escape analysis. It should also refer to culturally, politically, economically and technically sustainable development (Clark, 1993:E3.1). It is an acknowledgement that this was not achieved in the past, even by liberal modernisation. In this thesis, however, sustainable development in the context of development projects is simply defined as the benefits of development initiatives and opportunities continuing after any intervention is completed (*ibid.*).

Modernisation called for quantitative development and liberal modernisation began the journey in search of qualitative development. It would not be fair to blame liberal modernisation entirely for the failure of conventional development. For modernisation in the large institutions such as the World Bank, Asian Development Bank and International Monetary Fund still exists as neo-liberalism. Modernisation in practice, it can be argued, was largely responsible for Third World debt which, together with world recession, created a context within which liberal modernisation was constantly undermined by, for example, World Bank policy, despite the Bank's rhetoric. Liberal modernisation, arguably the most widely implemented model of development, has alleviated a great deal of poverty in the Third World, and it is under this model that smallholder cattle projects have been implemented in Samoa.

2.4 The Third Paradigm

It is quite difficult for someone who has been educated into thinking of development as liberal modernisation, as most New Zealanders have, to really take in the fundamental meaning of the third paradigm.⁶ It is so fundamentally different and yet appears to be quite similar. Since the decline of socialism, however, it provides the most widely accepted surviving alternative model to capitalist development, whether liberal or neo-modern. It could be argued that the dichotomy in development theory is now not capitalist:socialist but top-down:bottom-up development.

As a paradigm, the third paradigm encompasses an eclectic grouping of people-first theories including thinking from people-centred development, populism, gender studies, sustainable development, post-Marxism and post-modernism. In this thesis, however, it will be used to refer mainly to ideas from people-centred development, populism and post-modernism.

2.4.1 People-Centred Development

The father of 'people-centred development' was Paulo Freire. Freire developed his ideas while working with literacy programmes in Brazil in the early 1960s. He was a socialist and had a structural view of the causes of underdevelopment. He argued that oppressed people lack a critical understanding of their reality. That is, people believe the world is fixed and must be adapted to; that it cannot be changed, or at least not by them. Vested interests

encourage the belief that a person's situation is 'natural' and therefore unalterable. It is this lack of critical understanding which provides the justification for intervention.

Freire's response was to encourage groups to collectively question and critically analyse ('reflect on') their position in the world, the causes of their oppression, using their own real problems and experiences; and to reflect on their power to transform the world and bring about change by collective action. This process of questioning things previously taken for granted, using their own experience, would enable people to come to understand that their view of the world and their place in it (their consciousness) is shaped by social, political and historical forces which work against their interests. Freire called this process 'conscientisation'. It leads to an awareness of the self as a person who can reflect and act upon the world in order to transform it. Freire believed in the liberating power of education. Psychological liberation would lead to physical liberation when the critical analysis of experience linked with action to bring about self-determined, self-directed change. Freire thus developed a model of reflection and action, a 'reflection-action praxis'. It was circular: action would then lead to further reflection (Freire, 1972,1976).

The tool Freire used was literacy:

"As illiterate men [sic] discover the relativity of ignorance and wisdom, they destroy one of the myths by which false elites have manipulated them" (Freire, 1976:81)

Literacy, in addition to enabling people to believe in themselves and their own capability for reflection and expression, also enables them to write letters to politicians, to access information, to communicate, form networks and organise, and to better defend their rights. It also helps them follow employer instructions and read public education material, but this was not Freire's objective. His was a bottom-up philosophy, these latter things facilitate top-down development.

People-centred development then, fundamentally widens the definition of development from the material to the political (with an understanding of political economy) and the psychological:

"power has been appropriated by ... a class of professionals - who have possessed monopoly over development knowledge and expertise. Direct producers ... have submitted to this class out of a sense of intellectual inferiority" (Rahman, 1993:70)

In contrast to dependency theory, which externalises the causes of oppression, people-centred development does not assume this. Often local elites and sometimes oppressive traditional cultures may be found to be the cause. But essentially development is seen as a political process rather than an economic one (Oakley and Marsden, 1984; Friedmann, 1992).

The third paradigm calls for the reclaiming of access to development knowledge and a reliance on people's own knowledge. But because of the lack of confidence and intellectual skills, which have been surrendered previously, intervention is paradoxically required to re-equip people with skills to critically analyse the causes of their oppression and determine the paths they wish to take. This self-reliance is not the same as self-sufficiency but rather is the ability seek appropriate knowledge and to discriminate between alternatives, in other words to take on the role of decision makers.

Paradoxically people-centred development requires intervention. The rationale for intervention is that people may not have the skills to recognize the true nature of the problem, or the oppressive context of their lives. At one extreme they may be so oppressed they are too scared to do anything. They may not believe they can do anything to change their situation. They may not know what solutions are possible or available or have access to these solutions. They often lack the knowledge and skills to seek appropriate knowledge, assess new technology, discern possible negative impacts and discriminate between alternatives. They may not have the capacity to apply the solution to change their situation.

People-centred development sees people as fundamentally active and creative; development is:

"not ... delivering a material bundle of goods to the people, but ... facilitating the maximum scope for the people's creativity, enabling them to create their self-chosen bundle of goods including cultural and intellectual pursuits according to their own wishes" (Rahman, 1993:223)

Participation, a term that has been adopted with great enthusiasm in the last decade, is an essential ingredient in people-centred development. However, it is a concept, like sustainable development which, in the process of diffusion and adoption of ideas about development, can be, and has been, reinterpreted and modified to suit the world-view of the adoptee (Oakley and Marsden, 1984; Rahnema, 1992). The term participation has come to refer to many different things from internal initiatives and self-reliance to externally prompted mobilisation or co-operative implementation of pre-determined projects. The latter is liberal modernisation rather than third paradigm. It has also been applied to activities within the project cycle such as participatory research (Chambers, 1992), participatory evaluation (Feuerstein, 1986) and participatory technology development (Chambers et al., 1989), although these may be applied as either part of the liberal modernisation model or the third paradigm.

Within people-centred development, however, participation is aimed at stimulating a critical awareness among people of their own situation as a basis for their involvement in self-determined, self-directed change. This definition of participation acknowledges that in some contexts, the process of empowerment will include confrontation (Oakley and Marsden, 1984; Vivian, 1992):

"True popular participation goes much beyond the mere provision of labour and other inputs into projects initiated from outside the community; it involves decisions being taken and plans being formulated on the local level. In the context of development ... increased popular participation is necessarily a confrontational process, as the development goals of the elite normally preclude increased involvement of the poor" (Vivian, 1992:53).

People-centred development includes issues of social justice, human rights and democracy. Vivian (1992:62) sees that "the abolition or support of traditional lifestyles becomes a human rights issue". This is because traditional cultures and lifestyles, she argues, provide a

fundamental basis for community well-being and cultural and social identity (as well as better management of the environment). This is in complete contrast to the modernisation model in which traditional lifestyles and cultures are to be transformed into modern ones. People-centred development requires minimal cultural change, except where, by a process of action and reflection, people themselves decide to change aspects of their culture which are perhaps oppressive or no longer wanted.

There is also the criticism that cultures may have faults, hold technically incorrect beliefs and have ecologically unsustainable practices. They may be oppressive of women for example. This is probably the greatest dilemma for workers in people-centred development: how to respect traditional cultures that are oppressive and how to encourage change and conscientisation in this area without imposing one's own cultural views and reverting to a top-down approach. The process of conscientisation must include self-criticism.

People-centred development also takes a radical interpretation of 'sustainable development'. Adams argues that sustainable development must go further than reform (and neo-populism) and aim at the transformation of the development process:

"ultimately, 'green' development has to be about political economy, about the distribution of power, and not about environmental quality ... The 'greening' of development demands a more radical analysis, and a more transforming response" (Adams, 1990:10,13)

The concept of sustainable livelihood security was introduced by Food 2000 (1987), an advisory panel to the World Commission on Environment and Development, to which Chambers had contributed and he developed the concept of 'sustainable rural livelihoods' further (Chambers, 1986; Chambers and Conway, 1992). In 1987, Barbier wrote that "the primary concern of sustainable economic development ... [should be] ensuring that the poor have access to sustainable and secure livelihoods" (Barbier, 1987:103).

Chambers (1988) established a checklist of characteristics found in successful sustainable development projects, which were drawn from inductive research of real case studies. These are to use a learning-process approach, to put people's priorities first, to secure the rights and gains of the poor, to achieve sustainability through self-help (or what might be called

participation) and to place importance on the calibre, commitment and continuity of staff. Some of these concepts are extended further below.

It is this understanding of sustainable development, as sustainable livelihoods, which begins with the lives and needs of rural people, which is more useful and relevant to this thesis. Chambers' essential idea is that rural people must have secure control over their resource base in order to be able to maintain economically, environmentally and socially sustainable livelihoods. Most Samoans are fortunate to have never been alienated from their land and are free to maintain or modify traditional land tenure systems as they please (O'Meara, 1987,1995; Ward and Kingdon, 1995). Both urban and rural Samoans have also proven eager to maintain that access to and control of land, and cattle may have a role to play in this (Ward, 1995:87).

People-centred development has been influenced by many fields of thought, from populism to anthropology, from liberal modernisation to socialism and political economy, and from grass roots field practice, often by NGOs including indigenous NGOs and activists who have both taken up people-centred development and helped to define it. In the Pacific the best known example is the Solomon Islands Development Trust (Roughan, 1990,1993).

These multiple influences have made it difficult to define and it has not been worked through sufficiently by academics to be accepted as a theory of development yet, despite its popularity and inductive origins in field experience. The conflict inherent in this model goes back to Marxism, as does the emphasis on equality and the belief in the worker. The notion of mental dependence that development has brought about derives from dependency theory. The emphasis on collective organisation and action and the requirement for the equivalent of a 'vanguard' have strong Marxist origins. However, it also has non-Marxist characteristics such as an acknowledgement of the 'persistence of the peasantry' and the emphasis on a sense of 'ownership' which Marxism would remove. It is able to be used as a framework for analysis by those who do not see socialism as the only answer.

People-centred development is justified on two quite different grounds: first that people have the moral right to determine the path of their own development and second, that it is pragmatic. That is, it will work (while imported conventional development has not). It holds that small scale, locally appropriate, participatory development will bring about greater

well-being, equity and social justice for all in accordance with local aspirations. It 'makes sense'.

People-centred development differs fundamentally from liberal modernisation in that it is inductive in approach rather than deductive. In other words it is interested in 'what is' rather than 'what should be' according to theory. It is a model of asking rather than answering, listening rather than speaking, learning from the people rather than teaching. In practice it may appear to be much the same as liberal modernisation. For example both may identify the need for land reform. But the point of differentiation is who decides and why, and how did they come to that decision? Was it a top-down or a bottom-up process?

2.4.2 Populism: Spontaneous Development

Populism is the second of the group of ideas which contribute to the third paradigm. A populist response to social change originated in critiques of dehumanising urbanisation and industrialisation in both Europe in the 18th and 19th century and in Russia in the late 19th century, of which Chayanov's work is the most well known (Chayanov, 1925; Kerblay, 1971). These were theories by socialist intellectuals about peasant development, criticising the necessity of urban-based industrialisation for progress, and arguing against Marx's ideas that the peasantry would differentiate and that capitalism must be passed through on the path to socialism (Richards, 1985:15), rather than a response of the peasants themselves.⁷

Populism was defined by Umberto Eco as "spontaneous admiration for the proletariat" (Richards, 1985:162). It is the spontaneity that sets populism apart. In this, he said, it differed from Marxism which "do(es) not believe in the spontaneity of the masses but in their organisation" (ibid:162). The need for a vanguard is rejected in populism.

"Populism is any creed or movement based on the following major premise: virtue resides in the simple people, who are the overwhelming majority, and in their collective traditions" (Wiles, 1969:166)

There are two features of populism which are of particular relevance to this thesis. First is the concept of the 'moral economy' which was introduced earlier. This is the idea, originating in the work of Chayanov (1925) and taken up by peasant studies, that rural smallholders have a different type of economic system that is neither capitalist nor socialist.

It is not motivated by profit, but by the consumption requirements of the family and securing the needs of all its members (Kerblay, 1971:151; Harrison, 1982:246). Chayanov drew out the implications of this motivation as economic behaviour in which producing for subsistence needs was balanced by an aversion to drudgery. This balance varied with the size and life-cycle of the family/household, both in terms of the human resources it had available and its subsistence needs (Chayanov, 1925).

The significance of Chayanov's work today is that it focuses attention on the family/household as the unit of production and consumption which, it can be argued, is how most rural households in the Third World operate. In Chapter 4 it is described how the Samoan family operates in this way, and it is the family which motivates most, if not all, Samoan behaviour. Chayanov's work also raises the question of which factors motivate behaviour at the people-project interface. This will be discussed further later in this chapter.

The second relevant feature of populism is that an essential prerequisite is the meeting of two cultures or societies or subcultures in a society, one more economically advanced and powerful than the other. Populism arises as the result of collective awareness by one group of relative disadvantage, of alienation from centres of power and control, of being on the economic and political periphery (but not separated spatially as in dependency theory) while having to 'live by the rules of the rich'. It differs from a Marxist analysis in that the alienation is not class-based but culturally-based. It is a locally specific indigenous response to the conflict which arises from the meeting of two distinctly different societies where one seemingly overwhelms the other. A rather extreme example which illustrates the phenomenon is the cargo cults of Melanesia (Lindstrom, 1993): there was the recognition of a material gap between two very different cultural groups, an indigenous explanation for the gap, and indigenous attempts to close the gap.

"Populism emerges as a response to the problems posed by modernisation and its consequences" (Stewart, 1969:180).

Today in the Third World it is a reaction or response to pervasive Western influences and urban industrial modernisation which promised development but which failed to deliver. Modernisation let people down and instead often made life harder (Thaman, 1993). Populism is also a response to the associated capture and centralisation of power by the

state, its related bureaucracy and control over access to resources. Like people-centred development, populism emphasises politics rather than economics as it aims to regain control of access to resources and of the modernisation process. Populism has been defined as "a return of power to ordinary people" (Boyte and Riessman, 1986:np). But the method of achieving this is cultural, using traditional values and ideology because populism is also "the belief in the value of belonging to a group or culture" (Berlin, 1965, quoted in McRae, 1969:156). It is a search for a synthesis between traditional values and the need for modernisation. The response is entirely indigenous or 'bottom-up'. It is one of restoration, of regaining control, of 'doing it ourselves our own way'.

"The aspiration for something different, better, more truly indigenous than Western systems of development and yet as socially and materially effective is palpable everywhere. "Our own way" is the persistent theme; but it is far more often advanced as a creed than a plan" (Lewis, 1979 quoted by Wiarda, 1983:446).

Today populism is originating not from the West but from the Third World itself in a wide variety of indigenous moves to define new models of development (Wiarda, 1983; Moody, 1988; Rahnama, 1977), as well as in the writings of Western academics such as Chambers (1983) and Korten (1990). Populists seek indigenously defined paths of development which avoid the perceived disruptive and ugly consequences of industrialisation and instead aims to achieve development via traditional cultural values, aspirations and institutions (including agricultural systems), blending them with the selective use of modern opportunities (Clarke, 1978) and at the same time maintaining cultural identity. The importance and role of identity in development is increasingly being acknowledged although it was recognised earlier by authors such as Pitt (1973/74).

Populism is not anti-development although it may have an ambivalent approach to it. Populism acknowledges that development has its down side; that modernisation has both advantages and disadvantages. This ambivalence is found in writings about the Pacific such as that by Thaman (1993). She begins, for example by saying:

"The majority of our people are worse off today ... THE SUPPOSED BENEFICIARIES OF DEVELOPMENT END UP VICTIMS OF IT" (Thaman, 1993:A4.1, her emphasis)

but concludes:

"We in the islands need to evolve innovative theories and models of development that are firmly rooted in a genuine attempt at a *synthesis* of traditional and modern knowledge, skills and values, because that is the context in which development occurs ... we cannot have the one without the other" (ibid:A4.3, her emphasis).

The concept of blending the traditional and the modern is in sharp contrast to the dichotomy found in modernisation theory. This provides another test with which to assess the practice and experience of development in Samoa.

"there are not just one or two (First and Second World) paths to development but many and diverse ones, and ... the dichotomies between traditional and modern represent not real but false choices for societies where the blending and fusion of these is both likely and more widespread than the necessary or automatic replacement of the former by the latter" (Wiarda, 1983:434).

From the populist perspective development occurs as a process of cultural interaction and populism tends to be reactive rather than proactive. It includes the spontaneous resurgence of people's power and cultural identity, as well as slow incremental social change. Examples include the following of Gandhi in India, the fall of the Berlin Wall in Germany and the Maori renaissance in New Zealand. Such spontaneous responses, including resistance (Scott, 1985), to development stimuli (whether direct or diffuse) are occurring continuously throughout the Third World and among indigenous peoples in developed countries. People-centred development, in contrast, does not include spontaneous responses; it does not specifically preclude them but rather ignores them.

On the other hand populism does not preclude intervention. Just as opponents of modernisation argue that no-one has the moral right to impose development, populists would argue no-one has the moral right to withhold it. But populism is not a model of transfer or

intervention because it does not assume that the answers are external. It does not assume that the West has the answers but portrays Third World citizens as capable of generating the answers, of defining and determining their own development and being worthy of the trust to be able to do so (Freire, 1972:36). More than being people-centred, it is people-led.

In contrast to modernisation (and also Marxism) which (because of its origins in functionalism) has not been able to explain the persistence of traditional cultures and cultural renaissances, populism recognises the capacity of cultures to seize new opportunities and develop new strategies in accordance with their own culturally determined aspirations and values:

"the neglect of the ethnic question in development thinking is not an oversight but a paradigmatic blind-spot" (Stavenhagen, 1986:77)

It takes seriously the residents of the Third World as a living presence (Adams, 1979). It is unique in recognising the culture and motivations of the peasant family as meaningful, their lifestyle purposeful, their knowledge valuable and their constraints real. Populism's basic tenet is that small-scale, largely rural and artisan enterprise will guarantee equality of income and increased wealth for all. Because of its origin in inequality, greater equality is seen as necessary for development and a desired goal of development (Ionescu and Gellner, 1969). It stresses rugged self-reliance within a communal context, co-operation and reciprocity between independent units and the role of culture in creating self-awareness and providing and focusing identity. Rather than determining in advance the ultimate goal, populism incorporates a different definition of development which stresses the interactive process, and the central role of culture in that process. It:

"stresses the interplay and mutual determination of 'internal' and 'external' factors and relationships, and which recognises the central role played by human action and consciousness ... Social actors are not simply seen as disembodied social categories ... or passive recipients of intervention, but active participants who process information and strategize in their dealings with various local actors as well as with outside institutions and personnel" (Long, 1992:20,21)

Such an actor-orientated analysis recognises that Third World citizens are knowing, capable and active (Long, 1992:23) and also "locates individuals in the specific lifeworlds in which they manage their everyday affairs" (Long, 1992:33). They are recognised as the primary decision makers in development. It assumes that actors are capable of processing their experience, devising strategies, intervening in the "flow of social events around them", monitoring the responses and adjusting their strategies accordingly, "even within severely restricted social space" (Long, 1992:23-25).

"There is ... a healthy new debate within the sociology of development ... towards a more historically informed analysis of economic, political and cultural dimensions of social change which, while still recognising the importance of capitalist economic interests as globally determinant, acknowledges that at national and local levels such interests are shaped by and have effect through the indigenous political and cultural institutions" (Webster, 1990:96-97).

Populism includes the praise of the utility of traditional knowledge, technology and cultures in the modern world, especially in agriculture:

"It is now commonplace ... to laud the skills and understanding of peasant farmers in the Third World ... This new orthodoxy of peasant rationality and skill ... re-emerged in the 1970s as part of a liberal and populist reaction against unsuccessful technological triumphalism of rural development practice" (Adams, 1990:168,169)

Those making the call included Belshaw (1979), Brokenshaw et al., (1980), Richards (1985) and, in the Pacific, Clarke (1978). Richards concluded:

"'People's science' is worth pursuing ... not out of 'spontaneous admiration' for the peasantry (though for my part I am quite ready to admit such admiration) but on the grounds that it is good science" (Richards, 1985:162)⁸

In direct contrast to modernisation theory it is argued that traditional institutions need not be done away with but are actually useful in bringing about development. A populist approach

to development practice requires beginning with what is already known and building on that base.

"traditional institutions have, first of all, proved remarkably resilient, ... flexible, accommodative and adaptive, bending to the currents of modernisation but not being replaced by them. Second, these traditional institutions have often served as filters of the modernisation process, accepting what is useful ... while rejecting the rest. Third ... traditional institutions ... can often be transformed into agents of modernisation ... even serving as a base for new forms of indigenous development" (Wiarda, 1983:437)

The extended family, for example, is thought in modernisation theory to be incentive-inhibiting, but instead may motivate development. It may be suggested that the extended family can bring about development with minimum inequality. It can provide and share resources efficiently within its membership while minimising outside dependence and providing complementary specialisation, so maximising efficiency and co-operation.

"the extended family is the epitome of a successful team, with team productivity (or utility) being something considerably greater than the sum of individual marginal productivities (or utilities)" (Nugent and Yotopoulos, 1984:117)

In the Pacific, for example, Tukai writes that "'internal factors' are, in fact, not barriers to modernisation but can be mobilised to promote modernisation" (Tukai, 1988:14). He describes social change in a Fijian village where traditional forms of organisation have demonstrated the ability not only to survive but have also shown a "spontaneous capacity to adapt to, and merge with, modern ideas" (ibid:17).

Likewise Poirine (1995) has written of the utility of Pacific cultures with respect to development in Tahiti, explaining that what at first appears to be irrational behaviour to expatriates is in fact rational attempts to find "a harmonious balance of traditional socio-cultural and [modern] material welfare" (Poirine, 1995:49).

Many indigenous writers write passionately in defence of their culture and its utility (Wiarda, 1983; Tukai, 1988; Thaman, 1993; Poirine, 1995; Rahnema, 1997). In contrast to

ideas that tradition is out-dated they revere it not because it is old but because it works today. However, many of these writers, as we have seen, strongly differentiate between the traditional and the modern without recognizing that much of what was once modern is already considered traditional (such as Christianity in the Pacific) and a great deal of blending or synthesis has already occurred.

In conclusion, clearly there is much in common between people-centred development and populism. Both differ from modernisation and liberal modernisation in that they do not envisage one end goal but allow for multiple solutions in multiple contexts, or pluralism, and in advocating bottom-up development whether people-centred or people-led.

2.4.3 The Third Paradigm: An Appraisal

The rhetoric of the third paradigm is appealing. However, two questions must be asked: how much impact can it really have within the context of widespread poverty and globally dependent economies? and second, is it sufficient in itself or only part of the answer? If not, what other ingredients are necessary? Referring to participatory bottom-up initiatives Rahman acknowledges:

"it cannot be said that such work and initiatives have come anywhere near influencing the overall (macro) direction of society in any country" (Rahman, 1993:169)

This, he continues, is due to control of access to strategic economic resources and development strategies which is held by centralised institutions and structures, which handicaps the initiatives of ordinary people to improve their own lives (Rahman, 1993). In other words the failure of the third paradigm to make sufficient impact is not the fault of the paradigm but because the interests that it threatens are able to intervene and prevent it from succeeding. Nevertheless, in this sense it is like dependency theory; both are:

"radical critiques of the idea of development as global process, unmasking it as 'development of underdevelopment' or 'growth without development' ... [but] this radical critique has no way lessened the practical hold [of modernisation] ... All it has done has been to create, alongside the activities of development

experts, a body of ideas which cannot embody themselves in action, and so proliferate in helpless parasitic symbiosis with that which they criticize" (Adams, 1979:474-475)

Of course people-centred development and populism recognise more activity than dependency theory in that people are already living active lives but:

"An attractive utopian vision is not an adequate basis for a theory of development, nor does the desirability of a state of affairs guarantee its possibility ... the central weakness of populism in theory and practice is that it is unable to provide any coherent account of how a continuing process of rising material productivity and living standards is compatible with the maintenance of an economy in which peasant agricultural producers are the dominant social force" (Kitching, 1982:180, his emphasis)

The alternative position is that commercial agriculture, as recommended in modernisation strategies, will bring about greater prosperity and well being (Ward and Proctor, 1980, Sevele, 1980,1983).

Recently attention has turned to the success of Taiwan and South Korea where historical evidence has been used to support the model of a peasant-based development strategy. Land reform and subsidized support of peasant agriculture several decades ago are used as evidence to support a model which has elements of both liberal modernisation and the third paradigm (Korten, 1990). However, Jonsson et al., (1991) argue that this success was only possible due to the presence of other favourable external and macro-level circumstances:

"equity and living standards of individual peasants seem to improve through such a [peasant-based development] strategy ... However, to bring about economic growth, this strategy will require additional preconditions" (Jonsson et al., 1991:92)

These other factors included simultaneous rapid industrial growth (supported by US foreign aid) which provided demand and markets for rural products, absorbed excess labour and, together with lowering birth-rates, prevented high rural population pressure. An expanding

industrial sector also provided investment opportunities outside agriculture, drawing the rural elite to non-agricultural pursuits, leaving farming to the peasants, reducing pressure for land concentration and rural inequality. In other words smallholder farming is only part of the answer.

Samoa has prevented high population pressure by exporting its excess labour to the industrial sector in New Zealand and this strategy has also functioned to support and subsidise the rural sector via remittances. Without this it is doubtful that the traditional culture would be so vibrant and strong. Thus it is a combination of factors and not just rural family-based enterprise which is able to remove obstacles to development.

Populism has a tendency to idealise rural life or a past time when everyone lived in 'subsistence affluence'. Hill (1986) has been particularly scathing about the romantic way in which peasants have been portrayed as living harmoniously together in egalitarian communities:

"a largely unconscious Golden Age fallacy, which is shared by Marxists and non-Marxists alike: the sentimental belief that there was a time ... when egalitarianism reigned in the village, possibly being associated with communal farming - a meaningless expression" (Hill, 1986:70)

Populism is faulted for the denial of class exploitation and heterogeneity in rural areas (Byres, 1979) and the failure to acknowledge that cultures may be inegalitarian or oppressive in themselves, especially to women for example. Another fault is the failure to understand the role of heavy industry in producing the capital goods or means of production for light industry (Byres, 1979; Kitching, 1982).

Because of its origins in cross-cultural encounters, that is, contact between two variable cultures in a variable historical context, populism is manifested in almost unlimited variation. Because it rises spontaneously as people's movements there is no pure, original, archetypal populism (Worsley, 1969). It is not descended from a pioneer thinker as socialism is, nor does it have a continuous history like capitalism. The resulting variation is academically frustrating, with the result that populism is considered ill-defined, and is

ridiculed rather than criticised, with rather harsh terms such as "naïve", "absurd", "a myth" and "pipe-dreams" (Byres, 1979:210-242).

In summary, the third paradigm is not yet considered a theory of development despite its popularity. While it prescribes people-centred, bottom-up development it is, as yet, unable to provide a coherent theoretical justification for this approach or explain the experience of development.

2.4.4 Post-Modernism

The influence of post-modernism on development theory and in the third paradigm has been very important. Post-modernism is essentially a scepticism or rejection of grand unifying theories, such as modernisation theory and dependency theory.

"all of the grand discourses of Western society, which is to say all of the legitimating narratives which purport to provide valid and definitive principles, in any sphere, across all societies, can now be seen to be defunct" (Boyne and Rattansi, 1990:16)

Consequently the focus turned to diversity and difference. In development studies it offered new directions. Researchers began to explore variation in the experience of development and found an "unexpected diversity of empirically documented patterns and trends of Third World agrarian change" (Booth, 1994:10). This had a number of consequences. First, it further exposed the weaknesses of previous universal prescriptive theories and revealed their undemocratic characteristics and relative poverty, such as the denial of choice, and selective ignorance, which resulted from their reductionist approach.

Second, the new focus on diversity meant local explanations for diversity have been sought. The importance of local and historical context has been emphasised:

"solutions to development problems must be sought in the contextuality of development which is the product of particular historical processes. The context of development is constantly changing in scale, over time and among societies - creating ... new opportunities for variations ... development

frameworks ... [must be] capable of accomodating this geographical and historical diversity" (Brohman, 1996:325)

Third, studying development and diversity as it occurs in local contexts has brought development studies back into contact with development as it is practiced and so is potentially of more use to development policy and practice, "illuminating the alternatives facing policy makers" (Booth, 1994:5). Since diversity implies choice, a new emphasis on choice in the practice of development has emerged (ibid, 3-4).

A rejection of determinism opened the door to studying interaction as an explanation for local diversity and differential responses. This includes the interaction between local circumstances and histories, and broader external forces. The assumption is that external forces may not only shape, but may also be shaped by particular local forces (Long, 1992:20; Booth,1994). Research has revealed that rural development is a result of "complex interactions" between groups and individuals with different amounts of power and knowledge (Booth, 1994:11). For Long and van de Ploeg (1994) the key is studying interactional processes and their origins in belief systems, social relationships and power structures within a new post-Marxist understanding of political economy.

However, post-modernism has left some wondering whether theory should be rejected completely or whether there is some unity within the diversity that has been revealed. Booth (1994) and Long and van de Ploeg (1994) argue that studies of diversity can uncover the "micro-foundations of the macro-framework" (Booth, 1994:13). Booth argues that the value development studies can gain from post-modernism is not to give up on theory altogether but to change the approach to theory formation from deductive to inductive, placing enquiry before establishing social reality rather than vice versa.

"The generation of theories - higher-order explanatory propositions employing appropriate abstract concepts - remains the ultimate objective of social science research" (Booth, 1994:14)

This can take the form of trying to identify patterns of, and in, diversity, about which it is possible to generalise, and searching for explanations of diversity. Currently the third

paradigm is not a theory of development because it does not attempt to do this. It makes no attempt to generalise, explain or predict but is limited simply to 'making sense'.

This thesis however, takes the view that this is unsatisfactory:

"If we fail to produce new theories, our claims to relevance and responsibility will begin to appear hollow" (Booth, 1994:15-16)

The third paradigm, including ideas from sustainable development and gender in development, as well as people-centred development and populism, or what Brohman (1996) refers to as "popular development", is currently a loose collection of disparate and often seemingly unconnected ideas. However, this thesis proposes that there is a coherence to be found which can offer an explanation for variation and diversity. The issue of whether the third paradigm has the potential to be a theory, and how it might do so, will be taken further in Chapter 8.

2.5 A Theory of Development for the Pacific: MIRAB

There is one more theory of development that may potentially be relevant to the smallholder farming of cattle in Samoa. It is quite different in content and style from the larger universal theories considered so far. In Samoa agricultural production and the household-based farming system are set in the context of a MIRAB economy. The term 'MIRAB' was coined in 1985 by Bertram and Watters to describe small Pacific economies. They were looking in particular at Kiribati, Cook Islands, Tuvalu, Niue, Tokelau and later at Western Samoa in developing their model. Their argument was that migration (MI), remittances(R)aid (A) and bureaucracy (B) have changed Pacific Island economies to such an extent that they now form a entirely new and different model of development for the smaller Pacific Island nations.

The core of the Bertram and Watters' argument is that first, MIRAB processes actually dominate the development process and are not merely part of it; second, they are durable rather than temporary, and third, they are actually more desirable than conventional development (modernisation) given the limited resource base and isolation of Pacific islands.

Traditional emphasis on the importance of family and 'supporting the family' motivates migration and the sending back of remittances (Bertram and Watters, 1985). The phrase 'transnational corporations of kin' has come to mean the way families allocate their labour spatially between countries. They are members of an integrated social community which transcends physical or spatial boundaries; family networks which are spatially separated but maintaining a single socio-economic system (Bertram, 1993; James, 1993).

In the economy, remittances have become so important that they are no longer extras but are now fundamental. Remittances have been one of the factors contributing to social change in Samoa, leading to decreasing emphasis on extended families and increasing individualism: remittances are sent to individuals or nuclear families, most often to parents and then to siblings when the parents have died. Now when people need help they will write to immediate family in New Zealand, rather than seek help from the extended family in Samoa.

The relations between migrants and their home community remain very strong and are causing other changes as well. James (1991,1993) describes relatively recently created networks and exchanges that connect home and migrant communities.⁹ As well as hosting new migrants and helping them find a job, trading partnerships have become well established and migrants in New Zealand are increasingly sending back containers of 'gifts' which are then sold in flea markets in Nuku'alofa and Apia. Escaping duties (at present) and probably also taxation, they enter the vibrant informal sector of the dual economy. Likewise, before the taro blight, Samoan farmers used family connections to export taro to New Zealand.

James also reports that Tongan children may be sent back to Tonga to be brought up in the old ways and hopefully later provide the necessary second generation of remitters. In Samoa I observed that more often children could be sent to New Zealand to be brought up there, both reducing the dependency burden and also later to become remitters. The 'sale' of traditional items was identified by O'Meara in Samoa (1990). When people return to Samoa for funerals they are obliged to take large amounts of cash as gifts and also 'offer' to pay for food expenses of hosting guests and other costs. In return they receive fine mats which are traditionally given in exchange which they then bring back to New Zealand. Under the guise of tradition, the traditional objects are exchanged for cash. Samoans are also frequent international travellers and often holiday abroad with their emigrant families. This creates a

great deal of exposure to Western thinking, behaviour and practices. In summary, migration and remittances have caused major and fundamental social and cultural changes in the Pacific Islands, but the direction of that change is, at least in part, culturally determined.

The second component of the MIRAB economy is aid, which, while being part of the MIRAB model, is given under the liberal or Keynesian influenced modernisation model. That is, the rhetoric used to give it refers to helping Pacific islands increase their self-sufficiency and economic independence, and increase exports (Bertram, 1993). Much of the aid to the Pacific is of a different kind, however. It is not 'capital' aid designed to be a stepping stone to productivity and self-sufficiency, but 'welfare' aid going to the government budget. As so many people work for the government, and so much of the budget is paid out in salaries to government workers, this aid is effectively being paid out in wages. Viewing this positively Bertram argues:

"dependence on large countries has been the key to rising living standards and ... the means for preservation of indigenous societies and cultures" (Bertram, 1993:257)

However, critics of such aid argue that it has contributed to the decline in agriculture (Ward and Proctor, 1980). That is aid, together with remittances, artificially increases the money supply, creates artificially high exchange rates which makes it more difficult to export (further explaining the decline in agriculture), easier to import, and raises the cost of labour in other sectors especially agriculture, where almost all labour is now paid for. That is the theory. In Samoa, however, the exchange rate has steadily fallen from 1:1 to 1:1.6 (NZD:Tala) in the last twelve years, and plantation labour is still poorly paid.

Since this model was originally identified, another source of external income has been added to it: rental incomes (Bertram, 1986,1993). These include incomes from fishing resources, philately, the operation of tax havens, the sale of passports and possibly even leasing out space for satellites in the atmosphere, none of which require physical production or the use of labour. What is important is how this income is distributed as it could easily benefit only a few. Potentially its redistribution would be achieved by lowering taxes and increasing services. Samoan farmers do not pay tax on agricultural income but Bertram suggests some form of subsidies or price supports (Bertram, 1986).

The MIRAB model was identified first by studying the smaller Pacific countries with few resources. It must be noted that Samoa is 'middle-sized' and does have greater potential to operate according to the conventional capitalist models of development. The result is that both models are operating in Samoa simultaneously, resulting in mixed, sometimes contradictory messages being heard. This is particularly so with the issues of dependency and self-sufficiency. Influenced by Keynesian economics and dependency theory, the Pacific version of modernisation sees self-sufficiency as good and dependence as bad, or modernisation that causes dependence as bad (Ravuvu, 1988a). On the other hand, MIRAB messages suggest dependency is good and self-sufficiency is unobtainable. In Bertram's (1993) view it is the former message that dominates development rhetoric in the Pacific. But while farmers are urged to work harder and produce more, families know that an even better future is to be had if they manage to send at least some of their children overseas.

Bertram (1993) looks beyond physical borders to reconsider the meaning of development. If development is development of a people rather than a country then it can be said the modern capitalist sector of the Samoan economy is located in New Zealand, Hawaii and Los Angeles. To paraphrase Bertram's analysis of the Cook Islands, the development achievements of Samoans, which focuses on the standards of material welfare achieved by Samoan immediate families, whether by productive employment in Samoa or overseas, is quite different from the development of Samoa which focuses only on the domestic product within its physical boundaries (ibid, 1993:254). In other words development is the

"enhancement of the international collective net worth of islander groups (p254) ... [and] small island development achievements are sustainable so long as the indigenous people wherever they reside, retain a set of entitlements sufficient to support material welfare standards over the foreseeable future, while preserving or enhancing their collective identity and the natural environment of their home territory (p248)" (Bertram, 1993)

Hau'ofa (1993) also provides an optimistic view of migration and wide kin networks as a development strategy in contrast to the pessimistic conclusions drawn by 'experts' about smallness and dependency. The MIRAB model does not deny modernisation in terms of material welfare but argues that not only is there is a different and better path to achieving it, but also that the conventional path is unsustainable, damaging and a cul-de-sac. Bertram

argues that official discussions of development prospects fail to take this into account, with an inbuilt aversion to dependence and a misguided focus on self-reliance, "a political reaction against the alleged perils of dependency" (ibid, 1993:248). Instead he argues that 'dependent development' is preferable and sustainable. He continues:

"Under these circumstances, the "development" problem for planners and policy-makers is not so much the promotion of modern, capitalist, tradable-goods-producing sectors ... as the question of how rent incomes should (a) be made more secure and predictable, and (b) be allocated among members of the island society, to determine the "mix" of economic activities" (Bertram, 1986:810)

The question then becomes what is the role of smallholders and of tradition and culture? Bertram's answer is that:

"The promotion of productive activity ... finds its rationale not in its direct contribution to real income, so much as in its role in defining and reinforcing the roles of individuals within indigenous society and culture" (Bertram, 1993:253)

We have seen that the operation of this model has acted as a catalyst for considerable social change. But culture may also be seen as the provider of 'cultural services' and the "Pacific way of life" as an important component of the economy. For Bertram (1986:817) "the extent to which the cultural and economic vitality of the village mode of production is sustained or augmented" is one of four elements which determine the structure of the island economy. Likewise Poirine (1995) allows socio-cultural variables to play a crucial role in the economic model he develops on the basis that:

"kinship values that emphasise sharing and redistribution of material wealth' is the (informal) equivalent of the social security system in modern 'welfare states', ... with benefits not necessarily showing up in the GDP (p51) ... [In contrast economists] tend to overestimate the social welfare value of measurable market goods produced by the 'modern domestic sector', and underestimate the social and cultural value of non-market public goods and the

positive external effects of activities in the traditional sector" (Poirine, 1995:53)

Both Bertram (1986) and Poirine (1995) argue that the value of the village economy/traditional sector is so important that it is worth subsidising directly, for example through price subsidies for cash crop exports, because it will never be able to be self-supporting at current standards of living:

"taking into account the positive role of culture in social welfare may lead to the conclusion that traditional activities should be subsidised to maintain and encourage the positive external effects they provide to the whole community" (Poirine, 1995:68).

This, he says, is already done informally as remittances subsidise family and village traditional activity and it can be incorporated into economic models despite the fact that it "may appear to be a foolish luxury to most Western educated economists who view indigenous cultures as 'impediments to growth'"(ibid:69). In addition:

"People have to know where they come from and who they are in order to design a future that fits them, and to choose development models best suited to their needs and cultural background. In this sense, cultural preservation may, in many cases, be the preliminary condition of an endogenous cultural change process accompanying economic development" (Poirine, 1995:70)

The key question really is: Are MIRAB economies sustainable? Bertram and Watters (1986), Bertram (1993) and James (1993) are convinced that they are; James, because of the complexity of the relations between migrants and their home families which goes beyond simple remittances, and Bertram and Watters, because they believe the aid donor countries with which Pacific countries are closely associated (New Zealand and Australia), would be unwilling to see standards of living fall in the Pacific, having previously started 'welfare colonialism' the will is not there to get out of it. If they did, standards of living would fall because islands would be unable to replace it by increasing productivity enough. This would be embarrassing and therefore unacceptable.

In other words, a permanent new kind of economy has been established, or a new model of development which is quite different to the modernisation model. Interestingly the goal of 'high mass consumption' is similar but the route for getting to that goal is quite different. Whether this model proves to be sustainable or not, we can still conclude that exogenous factors play a major role in Pacific Island development.

It is in this context that populist development (based on household-based agricultural producers) could contribute to a continuing process of rising material productivity and living standards, not doing so standing alone but in the context of a mixed economy. However, despite the persuasive defence of the MIRAB model of development above, it appears to be crumbling with the rise of neo-liberalism in the 1990s. To New Zealand and Australia, the Pacific is no longer important enough to justify continued financial support. Both countries are pushing to end welfare colonialism, massively reducing budget aid and trying to force a reduction in Pacific Island public sector employment, all under the guise of 'reforming' Pacific Island economies.

MIRAB is not a conventional modernisation model but is a different model of development particular to the Pacific and perhaps other small states. It is an indigenous response to the opportunities offered. It has been grasped by islanders whether others approve or disapprove, whether part of orthodox development theory and development planning or not (Hau'ofa, 1993). From a development studies perspective it is a model of what is, rather than what should be. Migration and the sending of remittances was never planned but was and is simply people doing what they judge to be in their best interests in response to the opportunities for betterment that they perceive are available. In essence it is a populist response to perceived development opportunities. Is this theme applicable to the use of the opportunities provided by cattle?

This model also causes us to recognize that social and cultural change is occurring, as a result of exposure to Western influence but often within a cultural context as, for example, culture has motivated migration and remittance sending. This theme also occurs within the issue of land tenure (O'Meara, 1987). Do cattle also reflect this? Before these questions can be answered, however, issues surrounding the use of development projects as vehicles for putting development theory into practice must be examined. This research examines

development as cultural interaction and the development project subculture is a vital component in that process.

2.6 Development in Practice: Development Projects

2.6.1 The Development Project

The move from development in theory to development in practice has been through the development project. The research in this thesis is based within the context of one such project. In the modernisation model of development, development projects are "purposive planned interventions that are commonly used to accelerate economic development" (Cernea, 1985:4).

"Development planning is essentially an effort to focus on the key problems, both structural and dynamic, facing a country and to mobilise resources ... to deal with these problems ... Thus a development plan assigns a priority to, let us say [livestock development]; draws up programs and projects to meet the chosen goal; accumulates resources to finance the projects; and then sees the projects undertaken and completed" (Robinson, 1975, quoted in Simmons, 1984:433)

"[Projects] are instruments of policy implementation ... the primary means through which governments of developing countries attempt to translate their plans and policies into programs of actions" (Rondinelli, 1983a:3)

"A project is the investment of capital in a time-bound intervention to create productive assets" (Cusworth and Franks, 1993:3)

These definitions illustrate the top-down, interventionist, problem orientated, fund allocating nature of planning and project implementation and their origins in the economic world view and the modernisation paradigm of development. However, development projects have received a great deal of criticism. For example Porter et al., (1991) do not:

"see much scope in the present circumstances for the notions of 'equitable', 'environmentally sustainable', 'participatory' development futures currently popular in development literature ... much of this literature fails to recognize explicitly that modern development practice, in particular that which is directed towards the greater control and management of projects, is part of a broader social and political philosophy which assumes people are incapable of managing their own affairs and of making their own decisions" (Porter et al., 1991: xviii)

Chambers' book 'Rural Development: Putting the Last First' (1983) was a watershed publication that criticised projects and the practices and biases of the external 'experts' who planned and managed them. Other critiques have included Lele (1975), Rondinelli (1983a), Korten and Klaus (1984), Cernea (1985), Porter et al., (1991), Adams (1990) and Chambers (1997). Development projects have not only been accused of failing to provide development but of actually intensifying the difficulties faced by rural people (Porter et al., 1991), breaking down subsistence ways of life (Adams, 1990) and removing people's access to secure livelihoods (Chambers, 1988). Development projects have failed so spectacularly that books are now being written about 'project rehabilitation' (Kirkpatrick, 1991; Yaffey and Tribe, 1992).

In this section the development project, as a product of modernisation and liberal modernisation, is critiqued. The assumptions and values of modernisation and liberal modernisation have resulted in a top-down, problem solving interventionist approach to development in practice:

"Development ought to be what human communities do to themselves. In practice, however, it is what is done to them by states and their bankers and 'expert' agents, in the name of modernity, national integration, economic growth or a thousand other slogans" (Adams, 1990: 199)

But the critique of projects, the emergence of liberal modernisation and people-centred development happening 'in the field' have also led to prescriptions for better, more appropriate, people-centred development projects by writers including Korten (1980),

Rondinelli (1983a,1993), Korten and Klauss (1984), Cernea (1985), Conroy and Litvinoff (1988) and Oakley et al., (1991). Some of the main themes to emerge will also be outlined.

2.6.2 The Project Cycle

In what is called 'blueprint planning' the project cycle has five main stages: identification, design, appraisal, implementation and evaluation. These may be broken down further into eleven stages (Figure 2.1):

Figure 2.1: The Ideal Project Cycle

- | | |
|-----------------|---|
| Identification: | 1. Review of objectives/ selection of goals and/or problem identification |
| | 2. Project identification |
| Design: | 3. Initial research/ information gathering |
| | 4. Detailed preparation of alternative proposals including internal feasibility studies |
| Appraisal: | 5. Independent appraisal |
| | 6. Decision making |
| Implementation: | 7. Mobilisation of project resources |
| | 8. Implementation proper |
| | 9. Monitoring |
| | 10. Handing over |
| Evaluation: | 11. Evaluation |

The process begins with project identification. In theory, the role of project identification is to assemble a complete picture of problems and objectives, all the possibilities, all the constraints and to choose the best alternative. In reality, however:

"identification, in the sense of the generation of the basic concepts, is so neglected that it is scarcely there at all" (Smith, 1988:16)

Instead of being systematically identified, projects are selected ad hoc from "targets of opportunity" (Hoben, 1980:22), because they seem like a 'good idea', are something that worked elsewhere in the personal experience of the planners, they can earn foreign exchange required by national development plans or are recommended by UN agency or World Bank sector studies (Smith, 1988), they fill gaps or 'fight fires', they 'piggy back' on previous projects or are politically visible.

Projects must be unobjectionable to all involved: politicians, government bureaucracy, and development agencies (Clay and Schaffer, 1984) (this does not necessarily include the intended beneficiaries) and they must avoid 'unprecedented failure' (Hoben, 1982). The links to impressive sounding objectives such as improving the quality of rural life are often tenuous at best. (For example, projects to increase farmers income may increase the workload of women.) These broad issues are often ignored by planners who may not question why a project is being carried out at all.

Following project identification is research. An important assumption of blueprint planning is that the information and knowledge available to the planner is sufficient for good planning. Many authors argue that this is not the case:

"One of the ... weaknesses of centrally designed programs is that planners proceed as if they were writing on a clean slate and possessing all the knowledge relevant to improving the villager's life. In reality they are making interventions into well-established socio-technical systems" (Korten, 1980:498)

Despite the fact that sociological variables are often key factors in influencing project outcomes (Schoeffel, 1993), planners often do not recognize that they need or should want that information. Social and cultural information is frequently not available, not anticipated

as necessary or relevant and therefore not taken into consideration, or is irrelevant to the real needs of all the participants involved. In particular, Porter et al., (1991) argue convincingly that projects fail because they do not appreciate the significance of the specific local historical context projects fit into, especially the historical circumstances of the people which includes their experience of previous projects. Past lessons are not sought let alone learned from.

Instead planners have a technocratic approach to the definition of information needs. Imboden (1980) for example suggests the use of social indicators which enable abstract social concepts to be expressed numerically and therefore be easily integrated into a management information system. Even with regard to technical information, planners plan using the extrapolation of ideal (research station) data (for example regarding crop yields) rather than previous experience in the field.

Critics suggest that planners often know this but seek to avoid admitting it for fear of being thought incompetent. Secrecy, an important aspect of the development agency subculture, protects planners and administrators from the exposure of errors and from criticism which would undermine their 'mandate' to use planning to control development activities. Likewise, planning is mystified as a type of knowledge only possessed by experts and thus jealously guarded (Fals-Borda and Rahman, 1991).

In addition, social knowledge is gathered by a social researcher who is separated from the planner who is separated from the implementer. They may even work for different organisations. This sharp differentiation of roles is a Western ethnocentric practice and inevitably separates knowledge from decision making from action, which again is in sharp contrast to the third paradigm. Those in day to day contact with people in the field and with reality have no significant input into the definition of needs or with making design decisions. Those who make the decisions, the planners, are furthestmost removed from the field.

Next in the process is decision making. Smith (1988) compares a managerial decision making paradigm with the project cycle (Figure 2.2).

Figure 2.2: A Decision Paradigm and the Project Cycle

(adapted from Smith, 1988:21)

Decision Paradigm	Project Cycle
Awareness and Recognition	Omitted or Vague and Generalised
Diagnosis of the Nature of the Problem	Omitted or Vague and Generalised
Operational Definition	Project Identification
Generation of Options	Omitted
Preparation of Options	Project Design
Choosing Selection Criteria	Omitted
Evaluation of Options	Appraisal
Selection of an Option	Decision Making
Implementation	Implementation
Review	Monitoring and Evaluation

The generalised recognition of problems and objectives and the lack of real effort to identify desirable projects from the point of view of the intended beneficiaries has been highlighted. The next stage: the generation of options or alternatives, is generally (but not always) omitted altogether (Smith, 1988). This has considerable implications for the next stage: decision making. The decision to be made becomes not: which is the best alternative to achieve the objective? But rather: should we proceed or stop?

By this time, however, some commitment to host countries has been made, time, effort, money and emotion have been invested, and the one option takes on a life of its own: the unobjectionable becomes the unavoidable (Clay and Schaffer, 1984). The project paper becomes not a presentation of facts for decision making but an advocacy document prepared to justify the obligation of funds. Thus decision making is really done much earlier than indicated in Figure 2.2. If options are not presented for critical comparison and progressive elimination, the decision is actually made at or very soon after project identification and these early decisions increasingly narrow the range of later options (Porter et al., 1991). After that the project is just polished and refined without serious challenge.

The third omission in the project cycle highlighted in Figure 2.2 is the choice of selection criteria:

"[A] Western cultural blind-spot leads us to see all decision making as essentially single-criterion decision making" (Smith, 1988:17)

Generally only one decision criterion or one dominant criterion is used (e.g. the internal rate of return). Social analysts will recognise that in real life multiple criteria are used in decision making and these criteria vary between cultures in accordance with priorities and experience. In development projects there are many groups involved, each with their own criteria and decision making strategies.

The third paradigm in contrast turns many of these ideas upside down. It recognises that villagers are the primary decision makers in any project for they will decide whether to adopt, modify or reject the supposed benefits of any project, and so ultimately they decide its success, use, manipulation or failure.

After decision making the next stage in the project cycle is implementation. Traditionally in the project cycle, planning and implementation have been two very separate and distinct phases (Clay and Schaffer, 1984; Johnson and Clark, 1982). The dichotomy has its origins in Western cultural concepts: planners and decision makers are 'gentlemen' with higher status and higher salaries while implementers are 'tradesmen' who have lower status, are paid less and are not normally consulted.

They are possibly also local staff who cannot quite be trusted to make the right decisions, or who are easily overlooked as good thinkers or as sources of knowledge. Being poorly paid in comparison to expatriates, their value is overlooked. They may not trust themselves due to the intellectual submission and dependency recognized by Rahman (1993). Nevertheless their brains are picked but the ideas are not acknowledged in the final report. Rather, the 'expert' takes the glory. Competition is so fierce for consultancy work that he/she is forced to do this for career purposes.

A planner, reluctant to actually get involved in the field, then lacks an understanding of the feasibility of implementation. In addition, a project may have a life of say eight to ten years

from its initial conception right through planning and implementation to handing over, while expatriate staff are only in the field for two to three years and local administrators get promoted or are easily lured to emigrate because of lower pay and status than expatriate 'experts'. They may, however, be just as competent and, in addition, have a greater knowledge of social reality. The result is that those who initiate a project know they will be gone before it is completed, and those who complete it have less motivation because it is not 'their' project. In addition to inconsistency and confusion, no one will be willing to accept final responsibility for the project's success or failure (Clay and Schaffer, 1984).

In blueprint planning, planners in a team often work independently of each other, each optimising progress in his/her own field but ignoring the implications for other areas or other constraints (administrative, economic, political, technical, social, cultural), and the capacity for their plans to be implemented. The result is that when projects fail each is able to blame the other. The planner can claim optimal planning with poor implementation while the implementer can blame the planner for poor planning. Clay and Schaffer (1984) refer to these as 'escape hatches'. Instead it can be argued that every single component must be satisfied rather than a few optimised, for if one is not satisfied, it will act as a limiting factor, constraining all the other components (Johnson and Clark, 1982).

There is a final constraint on development projects: time. Projects are time-bound interventions (Cusworth and Franks, 1993:3) which work towards deadlines using techniques such as critical path analysis. Like the other requirements described previously, these distract planners from the larger objectives. As Brohman explains:

"the sustainability of the empowerment process itself should be regarded as at least as important as the immediate completion of particular projects"
(Brohman, 1996:346)

Even when an adaptive approach (Rondinelli, 1983a) is used, in which there is a flexible two-way interaction between project managers and beneficiaries, "it does not change the basic concept of a project as a time-bound investment to achieve specific aims" (Cusworth and Franks, 1993:10).

Because of time limits, the focus of projects has been on specific measurable outputs rather than outcomes (Clark, 1996). It is outputs (such as the numbers of cattle delivered to farmers), that are measured in the evaluation stage of projects. This is ideally for feedback into improved project planning and design in future projects although this process is fallible (Clark, 1993). In Figure 2.3 however, it can be seen that outcomes, in contrast to outputs, occur later, usually after evaluation. Outcomes are less tangible, longer term changes that occur outside the project cycle. They may include fundamental social and cultural changes, both positive and negative, and are seen as critical in the people-centred approach.

McKillop (1989), in his historical study of the outcomes of cattle projects in several countries of Melanesia, identified a progression of phases that occurred over several decades. The initial pioneer phase, when a good idea was identified; the rapid expansion phase of great enthusiasm; and the aid era phase of grand ambitious projects, all followed conventional patterns. That was followed by a disillusionment phase when goals were not reached, and withdrawal of aid funds as the projects were deemed to have met too many obstacles and failed.

That was not the end, however. McKillop described a final equilibrium phase; the establishment of an equilibrium which occurred over the next generation in which cattle were gradually accepted and integrated into the farming system. The point of equilibrium was not as grand as the original ambitious objectives but neither was it a failure.

"Although official perceptions of smallholder cattle rearing now tend to highlight 'failure', evidence suggests that this is an over-reaction. Gradually beef cattle have gained acceptance as an important component of smallholder farming systems" (McKillop, 1989:19)

This was the final outcome, it occurred over a significantly longer time period, and it involved only the participants. McKillop's work in Melanesia suggests a hypothesis for this thesis which will be examined further in Chapter 7.

This section has outlined a very critical and 'worst case scenario' description of projects. However, it is not undeserved as many projects in the last four decades have had disastrous consequences or have been complete failures for these very reasons. But as modernisation

has given way to liberal modernisation some mellowing and realism has occurred, mostly in the rhetoric and to a limited extent in the practice. However, it must be recognized that as projects are a manifestation of the modernisation world view there are limits to the mellowing that can occur.

2.6.3 Planning for People-Centred Development

"Development is the liberation of the creative energy of man [sic], and development planning is planning how to do this" (Rahman, 1993:15)

"What is needed is a blend of the old and the new, in the knowledge that there will be some tension and friction. The fundamental role of development agencies is to help work out that tension in a creative productive way" (Oliver, 1983:119)

There is a central contradiction between projects as instruments of control, and development as a process of liberation, of increasing choice and creativity. However, as long as development projects exist, what alternatives are there to improve them and incorporate people-centred principles? Can projects be people-led? Some recommendations include greater participation by the beneficiaries in the project cycle, improved social research methods such as participatory rural appraisal, appropriate technology, incremental change and better project fit via a learning process approach. It must be remembered, however, that the liberal modernisation and people-centred models can recommend similar strategies but for different purposes. For example in the liberal modernisation model of development, better social information is required in order to better fit people to projects by using the information to manipulate behaviour and response. In the third paradigm, by contrast, it is gained in order to better fit projects to people.

A sceptical approach must be taken to some approaches that claim to be people-centred. For example, while seemingly calling for the urgent overhaul and modification of development projects and recommending more appropriate adaptive approaches to development administration Rondinelli writes:

"although they must be culturally acceptable, the institutional network [read development projects] must be designed to transform traditional practices and behaviour into more suitable arrangements for economic growth and equitable income distribution. They must also be catalysts for change, transforming developmentally inadequate practices and behaviour at a locally acceptable pace. Moreover, they must gradually displace those traditional institutions that are incapable of change" (Rondinelli, 1993:176-177)

The question is who decides which practices are inadequate and must be displaced, and what criteria are used to make such judgements? In Samoa *fa'alavelave* have been judged thus but this thesis questions that judgement.

Probably the most widely accepted recommendation is participation in the project cycle (Oakley et al., 1991), especially at the very beginning of the project cycle where a new orientation towards understanding and incorporating the perspective, aspirations and problems of the intended beneficiaries is needed and where Chambers (1985) suggests that a reorientation towards seeking possibilities and grasping opportunities rather than problem solving is necessary.

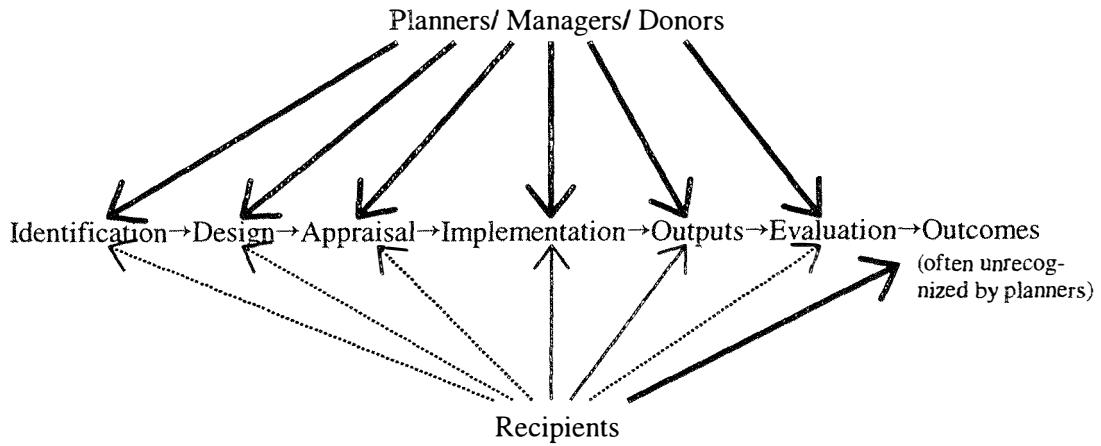
"Participation is not to get people to accept outsider proposals [but to] ensure that a jointly acceptable and successful initiative is taken" (Smith, 1988:24)

In conventional 'blueprint' planning, participation is collaborative and is seen as a way to improve the efficiency of projects. In people-centred development, in contrast, participation is empowering, enabling much greater control of the project by the participants. The difference between conventional and people-centred interpretations of participation in the project cycle is diagrammed in Figure 2.3. It is also immediately obvious from Figure 2.3 that if a people-centred model is followed a much larger interface between planners and participants over a much longer period of time is necessary and will require additional gap-bridging skills.

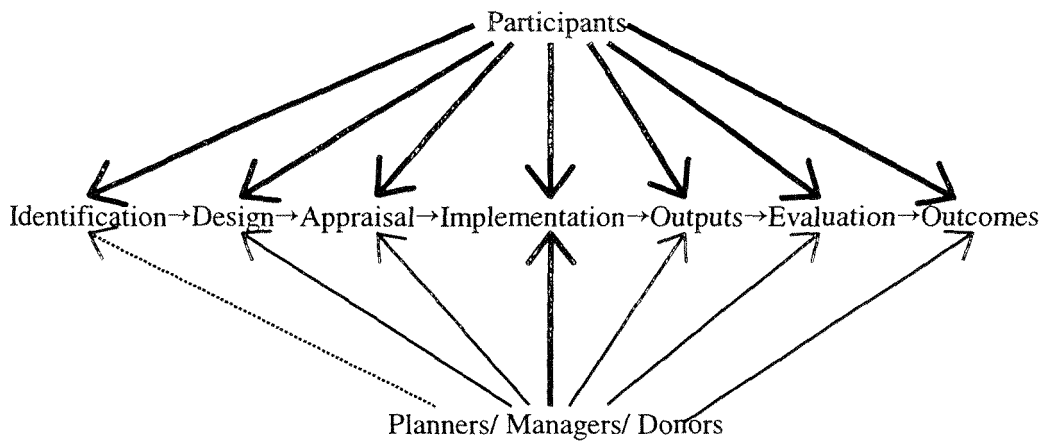
Figure 2.3: Interpretations of Participation in the Project Cycle

(adapted from Overton, 1997b:20)

A. Conventional Blueprint Planning: Collaborative Participation



B. People-Centred Planning: Empowering Participation



Key

-→ Minimal input
- Significant input
- Major input

Smith (1988) argued that project identification must be opened up to a broader range of interested parties including intended beneficiaries. Open-minded and innovative generation of alternatives and a range of options and choices (social as well as technical) is necessary. Smith argued that the best solution cannot be better than the best alternative available. Having alternatives to decide between means they are vulnerable to scrutiny and testing (rather than rubber stamping) and those that survive critical examination during decision making should have a greater chance of surviving implementation.

A second suggested improvement is more appropriate research and the incorporation of social research and knowledge into the process (Schoeffel, 1993). A common approach used is referred to as rapid rural appraisal (RRA) (Chambers, 1983), which encompasses a number of methodologies developed since the late 1970s (IDS Bulletin, 1981). Diverse data sources are used, including individual and group interviews, observation and the use of documented data. RRA has evolved to become more participatory and known as participatory rural appraisal (PRA) (Chambers, 1992,1997), and may be used for empowerment purposes as well as information gathering. The approach looks to project participants for insights, expertise, goals and expectations.

However, these information gathering methodologies, when applied to projects and despite their advance, have a number of flaws. For example, they are extremely short term, often only one or two weeks long, and therefore cannot provide the in-depth knowledge required to really understand a culture. They terminate before project implementation and therefore cannot provide information as the project is being 'fitted' during implementation and they cannot, within a short time, necessarily identify subtle processes or directions of slow unexpected change that are occurring within cultures. Rapid rural appraisal can be vulnerable to personal bias and to the subjective choice of what data and indicators are collected. When used as an appraisal methodology after the problems, project objectives and possible solutions have already been established it may just perform a positivist or legitimising function for decisions already taken without ever questioning their relevance or appropriateness (Wood, 1981). Actual planning and decision making thus remains firmly in the hands of the planner.

Nevertheless, the basic concepts of RRA and PRA are useful. Although there are many variations on the theme, one methodology that has earned particular praise is Hildebrand's Sundeo Approach (1981):

"a week spent in the field by a team usually consisting of five social scientists who are paired each day with five agricultural scientists. Over five days they change partners each day to reduce interviewer bias and to increase cross-disciplinary interchange. The group also meets each night to discuss the day's findings, make preliminary interpretations, and modify the investigation if necessary. At the end of a week, the many three cornered discussions - between farmer, social scientist, and agricultural scientist - have produced proposals for improved farm practices" (Chambers, 1983:68)

Its advantages are in concentrated personal contact and discussion between rural residents, social analysts and planners at the beginning of the planning process before decisions are made. The farmer is contributing to decision making, the planner is learning about social reality which can be quickly and directly incorporated into project design, and the social analyst is adding an important perspective. The social analyst need not be an expatriate, but a local who is able to bridge the gap, acting as a broker and social interpreter.

Another gap-bridging method that appeals is Senaratne's "windows into regions" (Chambers, 1983:66). Here ten villages were chosen to represent ten regions in Sri Lanka. Each was carefully studied by a researcher (a national graduate) who built up an intimate knowledge of the village. The villages then served as 'windows' so that the researchers were able to respond quickly to questions and problems raised by planners and were also able to independently raise problems, policy issues and neglected social factors, and then make recommendations. The researcher actually functioned as a broker between planners and 'his/her' village and thus other villages as well. The advantage was that the researchers were resident, permanent fixtures and knew 'their' villages very well and so were able to provide fast information and make recommendations throughout the project planning and implementation period.

Liberal modernisation has recognised that development should be a process of incremental change rather than sweeping reform. As well as reducing potential disorientation, alienation

and confusion, this also reduces the complexity and risk in planning. A seminal work in this field was the work by Rogers on the diffusion of innovations (Rogers, 1962). Rogers categorised and classified innovations, their adopters and their responses, modelling the processes involved. He identified a number of characteristics that innovations should have in order to facilitate their adoption. That is, they should be simple and easy to understand, have demonstrable benefits and be compatible. Rogers' categories and models were in response to his acknowledgement that innovations create uncertainty and responses of seeking further information in order to cope with that uncertainty.

A whole field of interest grew up around the concept of appropriate technology (Dunn, 1979) but in most cases it was Westerners retaining the role of decision-makers regarding appropriateness, rather than the beneficiaries. Chambers et al., (1989) have taken the concept of appropriate technology further with the concept of participatory technology development whereby the participants are the decision makers. The incorporation of indigenous knowledge and technology is also championed (Richards, 1985; Adams, 1990:168).

Lewis (1973:586) suggested that the concept of single and complete knowledge must be replaced by that of "perspectivistic knowledge": an acknowledgement that any one person's or group's understanding is partial and views reality from the particular position (in experience and culture) of the observer.

"This partial view of reality is not non-objective; it only becomes so when it is accepted as total reality ... Obviously, the perspectives of both outsider and insider reveal "certain truths"... each perspective has its own advantages and disadvantages, both intellectual and practical" (Lewis, 1973:586-587)

This theme of bridging gaps and valuing the contribution of all participants in the development process is continued by Korten who suggests that there must be:

"a high degree of fit between program design, beneficiary needs, and the capacities of the assisting organisation ... the critical fit is between the means by which beneficiaries are able to define and communicate their needs and the processes by which the organisation makes decisions. This may require changes

at both the community level - developing a way for the poor to express their needs - and the assisting organisation's level - developing ways for the organisation to respond to such information" (Korten, 1980:496)

To achieve 'fit' requires a 'learning process approach' (Korten, 1980,1984; Rondinelli, 1983a,1993; Clay and Schaffer, 1984). This was an acknowledgement that because of the complexity of development planning, constraints may remain hidden in the planning stage only to be discovered during implementation. There were two (complementary) alternatives: to improve the incorporation of the unknown and the unanticipated into blueprint planning (such as by incorporating more social research) or to proceed with what is known and continue to learn during the process, remaining flexible enough to incorporate new knowledge as it is learnt or becomes available: a 'learning process approach':

"Planning must be viewed as an incremental process of testing propositions ... and of reassessing and redefining both the problems and the projects as more is learned about their complexities and about the economic, social and political factors affecting the outcome of proposed courses of action" (Rondinelli, 1983a:15)

A learning process approach requires doing away with the traditional dichotomy between planning and implementation:

"Planning and implementation must be regarded as mutually dependent activities that refine and improve each other over time, rather than as separate functions" (ibid:15)

Planning should be flexible and adaptable, removing the constraints on managers to follow preconceived designs:

"flexibility in planning and design, opportunity to adjust plans as projects progress, and continuous redesign during implementation, are essential for success" (ibid:5)

Friedmann (1973) identified four essential elements of individual learning and Rondinelli applied these to the learning process approach:

"These are the ability to:

- (1) question existing reality and to raise questions about existing practices, relationships, and conditions, not only to understand and cope with them more effectively but also to appreciate how and when to make needed changes;
- (2) draw general lessons from particular experience, which in turn requires sharpened observation and inductive reasoning;
- (3) test theory in practice so that actions can be infused with and guided by experience; and
- (4) examine results in an objective and sincere way to uncover and examine mistakes as well as to apply successful approaches in new situations"

(Rondinelli, 1993:168 from Friedmann, 1973)

Rondinelli acknowledges that none of these are easy to apply in conventional development assistance organisations or projects. Indeed the need to write a second edition incorporating the same message ten years after the first (Rondinelli, 1983a,1993) suggests little changed in the intervening decade.

This process of joining action with learning is essentially the same as Freire's 'reflection-action praxis' but here it is to be practised by the planners. But it is not just feel-good social science because it is also a quite accurate reflection of Popper's (1959) scientific method: it is 'theory testing' and therefore vulnerable to falsification. 'Theory building' as found in modernisation theory has a much greater tendency to ignore contradictory evidence and only select supporting evidence. In the (ideal) scientific method in contrast, inductive observations are used to generalize and then errors are searched for via repetition, questioning, deduction, prediction and experimentation in order to improve the accuracy of a theory.

This section has introduced the development project which forms the context for the research in this thesis and has surveyed some of the modifications to the development project that have been suggested and are sometimes practised, particularly by NGOs (Oakley

et al., 1991). In the next section the interface between projects and participants is examined more closely.

2.7 Development as Cultural Interaction

Development projects may be considered cultural interventions that stimulate interaction and negotiation at the interface. This section further examines issues of intervention and interfaces, of interpretations and motivations, of opportunity and response. There are several groups that interact with each other in the development process: development planners, social analysts and development participants, each with their own culturally influenced motivations and objectives. Culture as a motivation or constraint is also examined.

The first interface is that between social analysts and development planners. Despite their influence on development theory and advocating for many years an increasing role for anthropologists in development (e.g. Epstein, 1976), anthropologists have had surprisingly little impact on development practice. Since the paternalistic history of their profession (Lewis, 1973) when they took up the theory of social evolution with enthusiasm and undertook to identify the different stages which place 'primitive' cultures along the path to modernisation, they have moved to defend traditional cultures, some taking quite a radical stand to do this. Hill (1986) is a good example. This however, has been quite threatening to development planners.

A debate continues between anthropologists and planners:

"Each side 'talks at' the other from an entrenched position, claiming that all would be well if only the other side would mend its ways" (Turton, 1988:126, his emphasis)

The ironic unwillingness of planners to incorporate anthropologists fully into planning is due to a number of reasons. There is a lack of understanding of the potential contribution of social analysts. With regard to Samoa for example, the Asian Development Bank has stated:

"In view of the significance of land tenure and customs in village agriculture, it is remarkable that such little detailed attention has been paid in the literature on agricultural policy to the findings of sociologists and economists working at village level" (Asian Development Bank, 1985b:22)

This may be attributed, it could be suggested, to the lengthy accounts of village life in a distinctively anthropological style that are not obviously relevant to specific development activities. Social analysts often lack an understanding of the planning process and its needs.

"Just as the economist's or agronomist's project-related tasks differ at each stage, so should the contributions and methods of the social analyst be tailored to the specific needs of each phase of the cycle" (Cernea, 1985:x)

In real life, however, the contribution of social analysts (e.g. anthropologists) has been limited to when and if planners and administrators who control the project cycle have decided to call for an anthropological contribution (Conlin, 1985). Often it is under-resourced and/or too late in the project cycle (Schoeffel, 1996:146). Traditionally social analysts have only gained entry after a project is finished, at the evaluation stage, with the task of analysing whether the desired objectives of the project have been accomplished. Of course it is too late at this stage for the social analyst to make a positive contribution to improve the project. Instead it has meant that anthropologists have gained the lingering reputation for being critical, complaining about mistakes, exposing projects as failures and thus creating an underlying antagonism between planners and themselves. Also, in the 1960s and 1970s, social scientists were reluctant to get involved in 'dirty' value-explicit research.

The second point of entry for social analysts has been social impact analysis or social soundness analysis at the earlier stage of independent appraisal. Although Pottier (1993b) argues the potential value of this approach, these techniques often only require criticism of other professionals' plans and very little involvement, if any, in the design and decision making process. Third, social analysts can provide descriptive social information in the initial stages of the project cycle: problem and project identification and initial research. Generally, however, it is only as initial research (e.g. pre-feasibility studies), after problems and goals have already been specified and projects broadly identified. The social analyst may research farming systems, seek to understand agricultural decision making or analyse

farmers' constraints, but very often they have little influence over how that information is used, how it is incorporated into planning, or if it is used at all (Schoeffel, 1993).

All this must be set against a background of increasing recognition by many authors, including development practitioners, of the lack of cultural awareness leading to project failure. For example:

"Since the beginning of the 1980s a hitherto all but unnoticed deficiency has been cited as an explanation for the failure of projects: ... insufficient consideration of the sociocultural or, rather, cultural dimension of development" (Bliss, 1988:101)

Ideally then, social analysts ought not just to contribute to project planning but participate in "continual ethnography" (Pottier, 1993a:7) throughout the project cycle from the beginning, shaping its strategy, structure, content and sequence of actions (Schoeffel, 1993,1996). But the third paradigm would go even further. Using approaches such as participatory action research (Tandon, 1980; Fals-Borda and Rahman, 1991) it would involve third world citizens themselves in this process (Natpracha and Stevens, 1990; Chambers, 1997). As we saw in Figure 2.3 greater participation in the project cycle would require a much larger and longer interface between planners and participants with social analysts as brokers.

However, this seldom happens because development planners and implementers, including Western educated nationals, are enveloped in their own development agency subculture which tends to isolate them from real life in the Third World (Pitt, 1976a; Rondinelli, 1993; Chambers, 1997). This subculture has its own world view and set of assumptions (originating in liberal modernisation theory), customs and practices (especially the project cycle and related procedures), goals, incentives and motivations (e.g. promotion or avoiding embarrassing failures), and constraints (e.g. administrative constraints) and sanctions (Staudt, 1991). Planners' objectives are to obligate funds and implement projects (Hoben, 1982; Conlin, 1985) without necessarily ensuring their true effectiveness.

Hoben describes how, after the Vietnam War and the following backlash calling for humanitarian objectives and values, new legislation was introduced which required USAID

to analyse every project for 'social soundness', increase participation and pay attention to interrelationships between technical, economic and cultural factors.

"The new requirement was not popular with AID personnel, for it added to their workload, did not seem necessary, raised complex issues that threatened project approval, and in general did not seem to contribute to the bureaucratic objective of designing projects and obligating funds within the congressionally set budget cycle" (Hoben, 1982:358)

Although many development assistance organisations, especially NGOs, have reoriented their priorities, several authors argue that this subculture, with its top-down interventionist assumptions and practices, has incorporated the new rhetoric of the third paradigm but has not been able or willing to practice it, especially in the larger projects run by governments and the larger agencies such as UN agencies, USAID and the World Bank (Porter et al., 1991; Rahnema, 1992). To do this would require a complete mental reorientation and fundamental changes in the distribution of power in practice (Brohman, 1996:270) which would be contrary to the basic assumptions of the development agency subculture.

"Although the rhetoric of development policy has changed dramatically over the past quarter of a century, perspectives on the nature of development planning and administration have changed very little" (Randinelli, 1983a:2)

"while virtually all development agencies currently contend that ... the involvement of the community in the assessment of needs and the planning of projects ... is their objective, few have actually put this into practice" (Brohman, 1996:270)

It is with this cultural practice, the development project, that people of the Third World must relate. There are many possible responses depending on what the project is perceived to offer. Epstein in her studies of social change showed that the opportunity that was perceived was often quite different to the opportunity that was thought to be offered (Epstein and Penny, 1972). The criteria used to assess the potential benefits or otherwise will vary from those that the planners envisaged. In seeking to gain as much as they can from the opportunity or to ameliorate any negative impacts, Third World residents will adopt,

partially adopt, manipulate, resist or ignore a project, or in extreme cases, sabotage it (Scott, 1985; Hill, 1986; Colburn, 1989). The response will seldom be as predicted.

Often gross cultural misunderstanding will occur, the planners failing to understanding the local culture and the locals failing to take on board the expected behaviour changes. This has happened in Samoa. In 1974, disillusionment with development and a deep rift between the 'experts' and people of Samoa developed to the extent that the Prime Minister ordered every UNDP official out of the country (Pitt, 1976a:47-48). Nevertheless some change is likely to occur. Perceived opportunities will be grasped, although possibly not in the way intended. Motivations will differ and unexpected adaptations will be made. However, because they were not prescribed, these changes are "usually unrecognised and unappreciated by the development agencies" (Pitt, 1976a:138). Planners will complain that the locals are not doing things the right way and will feel frustrated, and may even believe the project to be a failure (McKillop, 1989; Porter et al., 1991).

But what is occurring is a process of cultural interaction; a process of assessment, negotiation and even adoption. When two cultures meet they compare, interpret and judge the other, adopting, manipulating or rejecting values, behaviours, and technologies. Korten (1984) would consider this a learning opportunity for both sides. Certainly cultures interact and influence each other today more than at any previous time in history. Both modernisation and dependency theory inherently make this assumption; one positively, the other negatively. Historians, anthropologists and geographers have observed development as a process of change when cultures, usually one more dominant than the other, meet and interact. We have met this in articulation of modes of production theory and in populism. Based on detailed empirical inductive research two different interpretations emerged. The first was marginalization theory which suggested that many people were unable or failed to adapt to a modern economy and became hopelessly marginalised in a 'culture of poverty' in slums (Lewis, 1961). It rejected linear notions of automatic progression towards development, but it portrayed the lives of poor people as helpless, requiring sympathy and charity, without accounting for the persistence of their poverty.

"many societies in Third World countries have had a profound sense of their own worth suffer from serious cultural confusion when they come in contact with economically and technologically advanced societies" (Todaro, 1994:17)

But other researchers began to show that this was not always the case. Rather than being apathetic and resigned to their poverty, squatters showed considerable initiative, ingenuity and effort, active in working out strategies, determined to improve the quality of life for themselves and their families as best they could (Turner, 1976; de Soto, 1989). Examples include building houses from recycled scavenged materials and illegally tapping into electrical or water connections.

"[In Peru] the informal economy is the people's spontaneous and creative response to the state's incapacity to satisfy the basic needs of the impoverished masses" (Llosa, 1989, quoted in Corbridge, 1995:289)

Previously not acknowledged because this was not prescribed behaviour, it is now recognised that the formal and informal sectors are closely integrated, but in an exploited manner. Many people 'straddle' the monetary and subsistence economies in rural areas, spreading their risk and diversifying their sources of support (Porter et al., 1991).

There are a vast range of possible motivations for smallholder behaviour. These range from fulfilling traditional aspirations to increasing incomes, from taking advantage of opportunity to protecting livelihoods, from reducing physical exertion to investing in the future and from reducing risk to increasing independence, certainty and control. Another is the motivation of 'creating space':

"in the context of a participatory democracy ... emphasis is placed on an empowering process which ... gives people the strength to create a space for themselves ... to support their own self-reliant development (p10) ... "creating space" [is] the imperceptible movement of pushing out the frontiers and of achieving space within which [people] might begin to function and to take action (p26)" (Oakley and Marsden, 1984)

"particular groups or individuals attempt to create space for themselves in order to carry out their own 'projects' that may run parallel to, or perhaps challenge, government programmes or the interests of other intervening parties" (Long, 1992:34)

Markets and governments have often provided bad experiences for smallholders and they have learned not to trust them. Farmers have learnt to diversify risk and be as independent as possible. Porter et al., (1991) suggest the desire to remain independent of outside forces is an important motivator:

"Peasants the world over straddle both a subsistence economy in which they produce for their own consumption, and a cash economy in which they work for wages, sell commodities, or engage in small-scale business enterprise. This gains them a measure of security, and a measure of freedom from the market as well as from the government ... [as well as] this ambivalence towards the market, it is evident they also preciously nurse their ability to evade the dictates of government" (Porter et al., 1991:17)

Porter et al., (1991) highlight the need to cope with complexity and uncertainty and to create certainty in response. What is interesting is that Rondinelli (1983a) argues that project planners also act to cope with complexity and uncertainty and create certainty via blueprint planning.

Ironically, the goal of stability can be a main motivation for change or, to put it another way, people often wish to change in order to maintain what they have or to advance in security or status within their own traditional culture or social system. Community and kinship obligations, expectations, the pleasure of social interaction (affective rewards) or a subtle combination of these provide motivation. Change is an adaptive strategy for self-maintenance within a changing environment, but at the same time offers new opportunities for diversification and development.

One of the key themes of this thesis is the role of culture as a potential motivator. Modernisation theory saw tradition as a constraint on development. Liberal modernisation is somewhat ambivalent, seeking not to do away with tradition but to be more aware of it so that development can be built around it, so it can be made use of if possible, or at least so that development is more 'appropriate', more incremental, but still with similar goals. The third paradigm goes further to see tradition, culture and cultural identity as the source of inspiration or motivation for development, for indigenously defined development.

This chapter has surveyed the range of interpretations of development and the role of culture in theories of development in order to be able to assess which, and how, theories have informed the conception and implementation of smallholder cattle projects in Samoa, which might be useful in explaining the responses to the opportunities offered by cattle, and therefore which might be useful in suggesting better theory and practice in the future. Chapter 3 begins the process of asking these questions by asking how the role of Samoan culture in Samoan development has been interpreted by development observers and practitioners.

¹ 'liberal modernisation' is an original term used in this thesis. Its meaning is explained in Section 2.3.

² From its origins modernisation may be seen as taking two paths – towards liberal modernisation in the 1970s and a return to a form based on free-market, *laissez-faire*, neo-classical economics in the 1980s and 1990s (neo-liberalism). See also footnote 1.

³ Western Samoa Trust Estates Corporation.

⁴ The theme of policy being based on anecdote and a lack of empirical evidence will be returned to later in this thesis.

⁵ Ward responded that his position was misrepresented, that he was not defending the plantation mode of production but rather recommending a plantation mode of management in which smallholders worked with processing and marketing companies to increase efficiency (Ward,1984).

⁶ 'The third paradigm' is an original term introduced in Maiava (1988,1989).

⁷ This thesis is not concerned with the notion of the peasant and only uses the term where it is used by other writers. For reasons of continuity the reader may prefer to substitute the term smallholder or villager which is the equivalent for the purposes of this thesis.

⁸ However, a warning is sounded by Murdoch and Clark (1994) not to deify local or traditional knowledge just because it is 'local' or assume that it is a superior form of knowledge without disciplined investigation in 'action'.

⁹ James is describing Tonga, this writer has observed the same in Samoa.

Chapter Three

Samoa, Cattle and Development: Interpretations of Samoan Culture

3.1 Introduction: Samoan Culture: Constraint or Motivation?

Chapter 2 examined the broad theoretical context of this thesis, including the role ascribed to traditional cultures by modernisation theory, namely that culture is a constraint to development. This chapter examines how theories of development, particularly modernisation, have influenced the interpretation of Samoan culture as a constraint to development in Samoa, and how these interpretations have, in turn, influenced the direction of development, particularly in agriculture.

This chapter shows how such interpretations, with their origins in modernisation theory, have, over time, taken on a life of their own and become accepted wisdom. It is suggested that this has been established and perpetuated by processes of selective gathering of information from secondary sources, quoting of earlier work and a lack of empirical research.

This accepted wisdom, then, has affected, and been disseminated in, agricultural policy recommendations and implementation (emphasising government commercial agriculture). Examples are given of how these same assumptions and interpretations of Samoan culture are found in project documents and other documents specifically relating to cattle in Samoa, in which Samoan culture receives a significant portion of blame for the failure of cattle projects.

Finally this chapter identifies the four key assumptions about Samoan culture which this thesis sets out to test. As a counterfoil, an emerging antithesis with more recent repudiations of the conventional assumptions about Samoan culture is then introduced.

3.2 Culture as Constraint: Interpretations of the Role of Samoan Culture in Development

For more than a century much has been written about the role of Samoan culture in the development of Samoa. What has been written has then been extensively quoted and requoted in support of more recent analyses and echoed in project documents and surveys, in preference to empirical research.

The earliest to record his opinion about the link between Samoan culture and development was Turner (1884):

"This communistic system is a sad hindrance to the industrious, and eats like a canker-worm at the roots of individual and national progress. No matter how hard a young man may be disposed to work, he cannot keep his earnings: all soon passes out of his hands into the common circulating currency of the clan to which all have a latent right" (Turner, 1884:160)

In 1930 Hiroa wrote:

"the Samoans are ... more conservative than other branches of their race and their satisfaction with themselves and their own institutions makes them less inclined to accept the changes that foreign governments consider would be of benefit to them" (Hiroa, 1930:5)

The work of Farrell and Ward in 1962 is definitive and has been relied upon by later writers (for example Asian Development Bank, 1985a; Ronnås, 1993). They described the resistance of Samoan culture to change. For example:

"Tradition dies hard in Samoa. The many aspects of the Samoan way of life are vigorously and steadfastly protected. Nowhere else in the Pacific is innovation so resolutely resisted, and in few other territories is the cult of custom so deeply revered ... skill and diligence on the land are accorded little recognition, and husbandry is detrimentally affected by time-consuming community activity" (Farrell and Ward, 1962:232-233)

and:

"Samoans [were] resolutely confirmed in their attitude of resistance to change"
(Farrell and Ward, 1962:195)

These authors were not specific as to which Samoans were resistant to what change, but rather were making sweeping generalisations. Samoans were characterised as resistant to change and the culture as a 'hindrance' and 'detrimental'. It was assumed that change would be good for Samoans, and that this was to be in the form of changes to the culture or a complete break from the culture:

"economic wellbeing ... can be achieved mainly by a change in custom and tradition" (Farrell and Ward: 1962:236)

Thus while Samoans were considered resistant to change, change was considered necessary. This line of thinking was consistent with modernisation theory, although the authors may not have been explicitly aware of this. Rather it was simply generally accepted wisdom in the historical context of the early 1960s. On the one hand observers expected no change because culture was thought to be resistant to change but, on the other hand, were hoping to find the changes prescribed as necessary for modernisation. So when change was observed it could not be attributed to the Samoans themselves but to the influence of modernisation. This was expected to be seen in the younger generation who would make the break with tradition. Farrell and Ward say, for example:

"A revolution in Samoan agriculture could be brought about that would raise the general standard of living and have ramifications in all sectors of the economy. But ... to achieve such ends would require something in the nature of a social revolution ... It is possible that the seeds of a socio-economic revolution are being sown ... the question becomes one of how long tradition ... can resist growing restlessness and desire for improvements on the part of the younger generation" (Farrell and Ward, 1962:236, 237)

In this article Farrell and Ward's argument involved a contradiction, namely culture was resistant to change but change was occurring. This contradiction perhaps arose because the

concept of modernisation also stressed both the conservatism of traditional cultures and the need for radical social change. Farrell and Ward attributed change to Western influences over a long period of time and identified it as change away from Samoan culture, towards Westernisation and Western attitudes and behaviours. This was consistent with modernisation theory. Other authors also observed that social changes were occurring. In 1962 Pirie and Barrett showed the contradictions present when they wrote:

"[Samoans] have always stubbornly remained themselves ... Conservatism has always been a feature of Samoan culture and the people are apt to make strenuous resistance to change" (Pirie and Barrett: 1962:63,64)

But they continued:

"the solid cultural front which Samoans felt it necessary to present to the alien world has weakened ... [There are] spectacular signs of an increasing alignment with European attitudes to political, economic and social processes" (Pirie and Barrett, 1962:64,65)

Pirie and Barrett again see things from a modernisation perspective, even if they did not openly draw on such theory. Progress was towards the Western model. They talked about 'progressive attitudes' and 'responding to new opportunities'. The changes they observed were particularly in the direction towards cash cropping, and the dissatisfaction felt by the younger generation, seen principally by very high emigration, whether to other villages, Apia or overseas. They related emigration to dissatisfaction with traditional Samoan culture by Samoans themselves.

They also saw the increasing tendency for younger untitled men to be more independent in the villages, clearing and farming land for themselves, and keeping more of the money they earned for themselves as a positive indicator. It is perhaps worth noting, however, that the younger generation of the 1960s are now the older generation of the 1990s. Changes have occurred over this time, but not necessarily as predicted in terms of a complete break with tradition.¹

The ambivalence seen in these writers is also found by comparing two other authors who wrote about Samoan culture nearly a decade later. Pitt (1970) and Lockwood (1971) wrote at almost the same time, influenced by the same intellectual context. They observed the same Samoan culture but managed to gain entirely different insights and come to quite different conclusions.

Based on his own fieldwork, Lockwood (1971) concluded:

"All the evidence presented so far points in one direction: Samoans are generally content with the life they lead. They have little interest in the outside world which intrudes on them in the form of the market sector. They likewise have little evident concern for the future, little interest in productive investment, little interest to 'develop'" (Lockwood, 1971:206)

Lockwood was critical of Samoans' 'fatalism' and a system of giving and sharing which removed incentives to work or accumulate material wealth (both important ingredients of modernisation). He observed that:

"There is little evidence to suggest that these attitudes towards economic development are changing" (Lockwood, 1971:210)

He predicted, like Pirie and Barrett (1962), that rapid population increase would lead to declining levels of living and increased shortages and hardships.

Pitt (1970) wrote at the same time as Lockwood. He argued, however, that economic development was possible within the traditional economy:

"There has been, at least in the twentieth century, a consistent effort by Samoans to raise their own standards of living (p29) ... This demand for capital goods has a solid base in *fa'aSamoa* values (p44) ... There are, however, restrictions on capital demand mainly ... because of the weak development of opportunities or facilities provided by the Europeans (p47) ... most Europeans believe that indigenous capital formation is impossible or very unlikely in the Samoan situation (p45)" (Pitt, 1970)

In 1962, Farrell and Ward had written:

"It may be argued that a greatly increased cash income would bestow doubtful benefits on a villager with few facilities for saving and with limited wants" (Farrell and Ward, 1962:237)

Despite Pitt's rebuttal in 1970, another decade later, Ward and Proctor, in an Asian Development Bank survey of agriculture in the Pacific, wrote of Samoa:

"In considering the question of aspiration, it is worth noting that the social structure of Western Samoan society has remained stronger and more intact than any other in Polynesia. It may be that the strength and conservatism of this social system has resulted in aspiration levels rising more slowly in Western Samoa ... If this were the case, the existence of the lower aspiration levels would also reinforce the argument that ... much of the society has reached some form of temporary (perhaps semi-permanent) plateau of satisfaction ... The social and motivational constraints now in operation appear unlikely to be weakened ... without some fairly substantial change in the organization of production" (Ward and Proctor, 1980:400)

This argument, which echoed Lockwood, was suggested as a hypothesis to explain the 'poor performance of the agricultural sector'. Low productivity was blamed on low aspirations without any apparent field research to back it up. The idea of limited aspirations and the linkage that was made to subsistence affluence were taken up in later publications including the Asian Development Bank (1985b:22) where what was a hypothesis had become accepted wisdom and it was given to account, at least in part, for lack of growth in agricultural production. Other competing hypotheses offer alternative explanations. Two of these include the influence of migration, resulting in shortages of agricultural labour (Shankman, 1976), and the MIRAB effect (Bertram and Watters, 1984,1985). O'Meara (1983), in his PhD thesis, based on extensive fieldwork, also offered an explanation in terms of low market prices, especially when compared to other sources of income, and restricted market access for agricultural products. O'Meara also showed that Samoans have neither low aspirations nor have they reached a plateau of satisfaction.

While not denying that Samoans do enjoy, compared with other developing countries, a level of living that might be termed 'subsistence affluence' (Fisk, 1962) or 'subsistence plenty', Fairbairn (1985) was concerned at the effect of the use of this term on official development policy:

"the notion of subsistence plenty tends to arouse a romantic picture of people living in a state of bliss and harmonious adaptation to their environment. Images of this kind could adversely influence official policy ... it has tended to give rise to a pessimistic view in respect of the ability of subsistence units to promote the economic development of the rural sector by exercising initiative and maximising pecuniary gains ... A firm empirical foundation for this view is however, lacking" (Fairbairn, 1985:335)

Ward and Proctor, however, used their own hypothesis to dismiss subsistence agriculture and recommend commercial plantation agriculture:

"the subsistence based mixed subsistence-cash mode of production ... is an unsuitable vehicle for sustained growth in production and incomes ... Little progress is likely to be seen in the agricultural sector until fully commercial operations, generally on a somewhat larger scale, begin to replace the socio-commercial operations now conducted by the vast majority of smallholders" (Ward and Proctor, 1980:402)

This recommendation had enormous implications for the direction of development planning and aid flows in agriculture generally and in cattle farming in particular. Aid was directed into the government-controlled WESTEC plantations, which grazed cattle under coconuts.² This was also consistent with modernisation theory at the time which held that aid should be directed towards governments as the private sector was not strong enough yet to respond effectively. Today this is increasingly being replaced by aid directed towards privatisation and the private sector.

Thus the importance of beliefs about the role of culture, especially as an obstacle to development, should not be underestimated in that they can impact on whole development

directions. Subsistence agriculture was neglected in this path to development, and was therefore less likely to succeed, providing further evidence of its unsuitability.

It is, however, ironic that after huge amounts of aid money were poured into WESTEC over several decades, it was always accused of inefficiency and had to be rescued from debt (FAO, 1990:8). By 1994 it threatened to collapse completely and was in a state of limbo awaiting government decisions whether to privatise it or not. Since then some WESTEC land has been sold to settlers around Apia and other activities curtailed (Fleming and Hardaker, 1995:69). By 1997 WESTEC's cattle farming activities had ceased in Savai'i and been severely curtailed in Upolu. At the same time smallholders continued to quietly farm cattle, proving themselves to be far more durable in the long run than Ward and Proctor's recommendation. The recommendation to move to large scale commercial farming came, was implemented and failed, while smallholders carried on. Ironically, the near collapse of WESTEC has, more recently, forced aid suppliers to rediscover smallholders as potential aid recipients.

Once it was accepted earlier, however, that Samoan rural society was resistant to change, frustrating planners and development agencies, it became an assumption that then went unchallenged and, furthermore, became the subject of academic explanations which can be seen as being influenced by the world view of modernisation theory.

The first was the theory of subsistence affluence and limited wants. Although its origins can be traced to the classic work of Chayanov (Kerblay, 1971; Harrison, 1982), in the Pacific it dates to the work of Fisk in Papua New Guinea (Fisk, 1962,1964), which Lockwood (1971) sought to test in Samoa in his fieldwork. Indeed Lockwood did find that 'by and large' the theory of subsistence affluence was applicable to Western Samoa. This theory essentially argues that in a subsistence economy all production is either consumed by the producers (such as an extended family) or wasted. As there is a limited capacity to consume, there is no incentive to produce more than can be consumed. Production is limited by the capacity to consume rather than the capacity to produce and, over time, the levels of production become cultural norms.

In Samoa the subsistence and monetary economies are now closely integrated. Fisk's argument was that when the subsistence economy begins to interact with the monetary

economy the same production habits will continue. The desire to produce for the market will depend on the desire to consume goods that cannot be produced by the household. This will depend on cultural and other factors. Fisk argued the result was a tendency towards target earning. That is, production for the market in order to be able to purchase a specific item or earn a specific amount of cash, followed by withdrawal from the market. One result is a negative production response to increased prices for subsistence goods, namely if farmers are paid more, they reach their target faster but produce less to do so.

It can be observed that Samoans do target earn, as many other people do also, in that their cash income, if it comes in a lump sum such as occurs when a cattle beast is sold, may be spent on larger items rather than daily subsistence requirements. However, it does not necessarily follow that they respond negatively to price increases for their crops. Once one target is met, it is quickly replaced by another target. Furthermore targets and constant incomes can co-exist where there is a need for regular income alongside big target expenses. While Samoans may enjoy a level of subsistence affluence, it does not follow that, as a result, they have limited wants.

The theory of subsistence affluence is seen in the writing by Lockwood (1971) and Ward and Proctor (1980). However it was strongly refuted by Pitt (1970) and by O'Meara (1990) who argued that Samoans are actually very materialistic and respond positively to price incentives. The 1985 Asian Development Bank Western Samoa Agriculture Sector Study (ADB, 1985a,b) also found that farmers were well aware of price movements for their products and responded positively to price increases. This is now the accepted view. Ronnås concluded that:

"the theory of target earning and limited wants associated with subsistence affluence can probably be discarded as largely irrelevant in the Samoan context ... the cultural isolation vis-à-vis the 'modern' society implicit in the theory of subsistence affluence is not true of Samoa" (Ronnås, 1993:345).

Nevertheless, basic subsistence production can be secured with relatively low labour inputs. Hence, time is available for other activities including ceremonies such as *fa'alavelave*. *Fa'alavelave* are an integral part of the subsistence economy and the level of subsistence affluence in Samoa allows *fa'alavelave* to flourish.

The second explanation for 'poor development performance' was *fa'aSamoa* (Samoan culture) itself which was seen as a major obstacle to economic growth. "According to this theory, the socio-cultural milieu in rural Samoa is fundamentally inimical to entrepreneurial development and economic growth" (Ronnås, 1993:346). A number of observers, such as Farrell and Ward (1962), Ala'ilima and Ala'ilima (1964), Lockwood (1971) and Fairbairn (1985), identified the different components of Samoan culture which acted as disincentives to increasing production.

These were first, the matai system, associated property rights and control over production factors (including land tenure); second, lack of control over the fruits of production by the producers which acted as a disincentive to production; third, the way status is ascribed rather than determined by wealth or material advancement; fourth, the communal pattern of life which emphasises sharing, gift giving and reciprocity (Ronnås, 1993:347-348) and fifth, the importance of equality and social balance (Ala'ilima and Ala'ilima, 1964).

The Asian Development Bank Agriculture Sector Study (1985a) summarised the prevailing view in a nutshell:

"There is a conventional view that *fa'aSamoa* institutions and behaviour are responsible for agricultural stagnation. *Fa'aSamoa* has been interpreted as the Samoan's satisfaction with things as they are and that if they wanted to they could change the system. As most agricultural production takes place at the village level, this lack of motivation poses the most serious of all constraints to the future development of agriculture and to the economic growth of the country" (Asian Development Bank, 1985a:49)

This study can be credited with not accepting these views at face value and it went on to acknowledge that too much blame had been placed on culture. However, in the same year Fairbairn wrote that:

"[Samoa] has a socio-economic structure inhibitive to economic development (p302) ... The social system tends to blunt incentive and innovation (p305)" (Fairbairn, 1985)

He gave as factors that inhibited the expansion of rural agricultural output: the communal land tenure system which results in tenure insecurity; resistance to innovation and change; sharing and gift-giving which act as a disincentive to produce and accumulate, and to save and invest; agricultural income not being controlled by the producers themselves, but by *matai*; and villagers having limited aspirations, limited demand for goods and services due to the provision of services and income from other sources (subsistence plenty), and a high leisure preference (Fairbairn, 1985:305-306). He argued, like Ward and Proctor (1980), that because of faults in the subsistence sector "any major increases in export earnings must come from the commercialised sector of the economy" (Fairbairn, 1985:305).³

Authors who capture just a few years in their writing must find it difficult to see the slow changes which are accruing over several decades. O'Meara (1987:129) argued that changes in the land tenure system began as early as the 1920s. Yet in the 1990s authors were still seeing land tenure as a principle obstacle to development and one of the customs least likely to change. Fairbairn et al., as recently as 1994, isolated "rigidity in existing land tenure systems" (Fairbairn Pacific Consultants et al., 1994:3) as a critical factor to still be addressed. Fleming and Hardaker (1995), despite having championed smallholders in 1984 (Hardaker et al., 1984a), link development with the need for cultural change in Samoa. They continue to hold the view that traditional land tenure constrains agricultural production and *fa'aSamoa* inhibits initiative and enterprise (Fleming and Hardaker, 1995:67-70).

Some locals however, understood what was happening, that the apparent conservatism was "more apparent than real" (O'Meara, 1987:129). When O'Meara's ground breaking thesis work on land tenure became available it was warmly recognized and quickly incorporated into government documents such as the Report on the 1989 Census of Agriculture (Department of Statistics/Department of Agriculture, 1990). By citing it they were able to give authority to things they had not been able to say before:

"Many ... researchers view the Samoan land tenure system as an impediment to agricultural development. However Tim O'Meara, another researcher says 'like other aspects of Samoan Culture, the apparent conservatism of the land tenure system is more superficial than fundamental'. In fact, a dramatic change toward individual land tenure has been occurring in Western Samoan villages since well before World War II. This change is rarely recognized outside of the rural

villages ... This dramatic change in customary land tenure is significant ... [because] it shows that Samoans are not rigid or bound by tradition. They can and do adapt to changing economic circumstance" (Department of Statistics/ Department of Agriculture, 1990:13)

This chapter now turns to the processes by which ideas were selected and prevalent views were formed. It is argued that academic theoretical traditions were left behind as lay-people adopted the abstract ideas drawn from Parsons and earlier social thinkers (such as Durkheim) and reified them as unquestioned stereotypes. What were once abstract academic concepts became treated as accepted wisdom by later researchers and administrators and, as we have seen, affected development policy and direction. It may be suggested that a combination of the following occurred and perpetuated the probably erroneous view of Samoan conservatism. First, is the influence of culture shock and prior expectation when expatriates experience working in Samoa. Second, is the heavy reliance on previously published material rather than empirical investigation, and the convention of quoting. This can include the subjective selection of information and quotes, and the distortion of meaning by inaccurate or selective repetition. Third, is a lack of empirical research.

First, in writing about expatriate views of Samoan culture and behaviour it is often overlooked that expatriates have frequently faced very real frustrations. An account of this is found, for example, in Christensen (1979) who describes the frustrations when attempting to manage a dairy farm in Samoa: water pipes slashed, gates left open and the disruption to milking caused by *fa'alavelave*. This frustration is seldom acknowledged by writers, such as myself, writing in defence of traditional cultures but it is intensely felt and is in itself a contributing factor to the formation of the viewpoint that culture is an obstacle to development.⁴

In many of the works examined for this thesis, authors frequently quoted earlier works, as is academic convention, either to support or provide a contrast to their position. It is my argument that such quoting has been used as a substitute for accurate research, and is used to give statements greater authority than they deserve. That is, quotes add credibility and a greater reliability to a document because they indicate that the writer had 'researched' the topic thoroughly. No allowance is made for inaccuracy in the original material, nor are attempts made to source and test the original data or observations.

For example, Ronnås (1993) quotes as follows:

"Attempts to explain the apparent resistance of the Samoan rural society to any development efforts and 'the pathetic response to economic stimuli' (Pirie and Ward, 1962:72) in rural Samoa ..." (Ronnås, 1993:344)

Ronnås makes three mistakes in this quote. First, the article is by Pirie and Barrett (whose first name is Ward). Second the quote is from page 76, not page 72, and third and most importantly, the quote is incorrect. In fact what Pirie and Barrett said was:

"... the response to these assorted stimuli ... has been cautious or even apathetic in many villages ..." (Pirie and Barrett, 1962:76)

In 1990, O'Meara turned this around, arguing that, based on his research:

"Instead of finding a "pathetic" response to economic incentives, as Pirie and Barrett claimed (1962:76), the evidence shows a reasonable response to pathetic incentives" (O'Meara, 1990:192)

O'Meara also quotes "pathetic" when the word used was actually "apathetic" which has quite a different meaning. The article, in *Pacific Viewpoint*, is not difficult to access, but these mistakes undoubtedly arose from re quoting another author who had in turn misquoted the original. While these mistakes are minor, they suggest ways in which more important errors might be made. If such simple mistakes can be made in quoting, what emphasis should be placed on writing that is based on previously written material without testing it against current experience? It has no greater authority than field experience and empirical observation.

Inaccurate quoting can greatly alter meaning. For example Ward and Proctor wrote:

"It may be that the strength and conservatism of this social system has resulted in aspiration levels rising more slowly in Western Samoa ... If this were the case, the existence of the lower aspiration levels would also reinforce the argument that ... much of the society has reached some form of temporary

(perhaps semi-permanent) plateau of satisfaction" (Ward and Proctor, 1980:400)

However, this has been repeated as:

"The Survey [i.e. Ward and Proctor] noted that ... aspirations have risen more slowly than elsewhere and that the society may have reached some form of temporary or semi-permanent plateau of satisfaction" (Asian Development Bank, 1985b:22)

When the qualifying phrases 'It may be that', 'if this were the case', 'the argument that' and 'perhaps' were not included in the quote, Ward and Proctor's hypothesis was changed into a statement of accepted wisdom in an official document which made recommendations for development policy. The selection of particular words or phrases to quote is dependent on the expectations of the writers who may use a quote to support his/her view. It could be suggested that over time, by these processes, original meanings could become distorted.

Extensive re quoting also runs the risk of perpetuating old myths, when the facts, if once true, have long since changed. This is exacerbated by the anthropological concept of the historical present – that societies have no history and so what is written in the historical record is true in the present. Repetition tends to obscure changes and is based on an assumption that culture is static and passive. For example, views that land tenure is an obstacle to development are, as we have seen, often repeated, but without an empirical basis.

Another example relates directly to smallholder cattle farmers. Lincoln International (1991a:5, 1991b:9) state that only 21% of smallholder herds in Samoa are increasing in size. This is attributed to the Asian Development Bank (1985a,b) although it could not be located. I believe, however, that it was probably originally sourced from research conducted by Parker (1980) in 1979, some twelve years earlier. This thesis shows, in contrast, that considerable change occurred during those years and a much higher figure is recorded in Chapter 7.

Published work provides a historical context, a framework for analysis of observed phenomena, a guide to the making of such observations. Each is equally important in testing

the other: theory tests observations, and observations test theory. However, if the aim is not to test theory, then theory can unduly influence observations such that the observer observes what theoretically they expect to observe. Alternatively observation becomes random and chaotic. Quoting, whether directly or indirectly, has often been done in Samoa under the strong influence of the modernisation view of culture and its role in development, which has been perpetuated rather than challenged.

"There is a vital need for firm empirical studies and basic statistical information about the subsistence economy and village life, to destroy many current misconceptions in these areas. Statements are frequently made about the subsistence sector by persons having very little firm empirical foundation for their views. And usually, no attempt is made to explain that the opinions expressed are essentially personal judgements" (Fairbairn, 1985:325)

Such empirical studies have been conducted in Samoa by Lockwood (1971) and O'Meara (1986) and yet even then they gave entirely different interpretations to their research. Perhaps the best explanation is that interpretations are strongly influenced by expectations and expectations are indirectly rooted in current world views or theory, (or a desire to oppose them as Freeman concluded regarding the work of Margaret Mead (Freeman, 1984)). Thus there is a two-way relationship between research and earlier work; all research should reflect on earlier work for contrast or similarity.

Most observers would agree that in the past, the modernisation world view was held by many, if not most, Western development practitioners. But since the advent of 'people-centred development' in the 1970s it is possible to interpret the role of culture differently. However, pre-seventies interpretations continue to reappear in the eighties and nineties in the practice of development projects and in cattle project documents, as will be seen in Section 3.3.

3.3 Interpretations of the Role of Samoan Culture in Development of the Smallholder Cattle Sector

The views of the role of Samoan culture in the development of agriculture in Samoa which we have examined above can also be found applied to cattle. Expressed in project documents and repeated at seminars (Tevita, 1985:153), these views indirectly and

sometimes directly influence policy and the design and implementation of cattle projects. Although not always explicitly stated in writing, they are often assumed by project personnel and educated Samoans. I have heard them expressed many times in conversation, often spontaneously in response to my revealing my research topic.

It has often been assumed that my objective was a criticism of the hindering role of Samoan culture in the development of the smallholder cattle industry in Samoa. However, this section makes no such assumptions but rather identifies the assumptions made by previous writers about the role of Samoan culture, and particularly *fa'alavelave*, in smallholder cattle farming, in order to test them. The hypothesis is that they will not be supported by empirical research.

Below are some examples of assumptions about Samoan culture in relation to the development of a smallholder cattle industry as found in project documents. These examples are indicative rather than an exhaustive survey, based on the examination of a number of documents. However, sourcing of documentation has been limited due to much of it being 'confidential', my lack of authority to access it, as well as some perceptions that I posed a threat. However, these same ideas have frequently been expressed to me in conversation. The first example is from the Asian Development Bank in 1979:

"under the social system of the country, farmers might find themselves under pressure to provide cattle for ceremonies like weddings, funerals, etc. and for local feasts. According to the general manager of WESTEC, about 30 per cent of the breeding cattle in the country are slaughtered for ceremonial reasons. This is not specific to Western Samoa. As mentioned in the Bank's South Pacific Agricultural Survey, "numerous small livestock enterprises have 'failed' when farmers have contributed animals to meet social obligations and thereby successfully gained status and approbation"" (Asian Development Bank, 1979:20)⁵

The Asian Development Bank's 1985 Western Samoa Agriculture Sector Study stated:

"In general, village cattle are not sold for commercial purposes but are maintained to meet social obligations. Village stock has been distributed at

highly subsidised prices, and there is consequently little appreciation of its value, which results in indiscriminate slaughter of animals" (Asian Development Bank, 1985a:9)

It makes the specific recommendation:

"Reduce slaughter of female breeding stock ... educate village producers not to slaughter breeding animals for ceremonial occasions (p20) ... extend the campaign against the indiscriminate slaughter of breeding cattle (p121)" (Asian Development Bank, 1985a)

"Cattle have now been adopted into the traditional *fa'alavelave* system, which has had some quite important consequences for the national herd ... in most customary villages very few cattle are sold for commercial purposes - and most owners maintain their animals mainly to meet social obligations. On such occasions, it is usually the largest animals that are slaughtered, which may be the bull and/or breeding cows. There is generally a lack of a commercial attitude to beef cattle production ... village people do not appreciate the value of their animals and often slaughter valuable breeding stock before they have had a chance to reproduce" (Asian Development Bank, 1985b:69)

The Study does acknowledge that to a certain extent this occurred because for many years cattle were supplied to villagers at highly subsidised prices.

Often the evidence is anecdotal and it is just as frequently expressed by urban-based local administrators as by expatriate teams or missions. For example O'Meara writes:

"People who believe that villagers are not economic minded frequently cite stories that show how planters subvert economic goals to social goals. A local development officer told me of a villager who started a sizeable cattle herd ... in spite of initial success, the herd soon dwindled because the man could not refuse the requests of his many relatives who each wanted a cow or two for a funeral. Finally, the man slaughtered all his remaining cattle for a ceremony of

his own, leaving him no way to rebuild his herd (and perhaps not incidentally, leaving him no way to repay his loan)" (O'Meara, 1990:219)

Likewise it is possible to identify similar anecdotes from among the research for this thesis, and such tales do stand out. For example one respondent once had twenty cattle. Five were stolen, two died while calving, four escaped, two died on their ropes, one was slaughtered for a funeral, three were slaughtered because of disease on the vet's recommendation and the remaining three were sold to the butcher for income. And in another case an entire herd of fourteen cattle were slaughtered for the funeral of a high chief (Maiava, 1993). But how typical are these cases? Or do they simply illustrate that "in Samoa, as elsewhere, some people are wise and skilful and others are not" (O'Meara, 1990:220).

In AIDAB's 1987 Integrated Development Strategy for the Western Samoa Beef Sector the role of culture is covered by the solitary statement "Cattle have been adopted in the traditional *fa'alavelave* system with a majority of the slaughtered stock used for this purpose" (AIDAB, 1987:37) Likewise an FAO Agriculture Sector Review simply stated that:

"Livestock development [cattle] has been hindered mainly because of their use as brush cleaners instead of productive animals ... many smallholders still consider cattle mainly as status symbols to satisfy social commitments rather than commercial activities" (Food and Agriculture Organisation, 1990:24)

All of the reports, surveys and reviews quoted thus far did find fault with many other infrastructural and technical aspects of the cattle industry in Samoa and did not isolate culture alone. Other technical constraints were recognised and many of the recommendations were worthwhile. Often culture was hardly mentioned as in the last two examples. But considering the time and money that was poured into such studies (conducted by expatriates), it is surprising (or not so surprising) that no proper research into the role of culture was conducted so as to clarify the true picture.

The final example is from Lincoln International (1991a,b). In these documents the progress of the MFAT funded Brucellosis Eradication Project is analysed and suggestions for future projects made.

"Traditionally, the best animal is supplied for *Fa'alavelave*, thus there is little chance of retaining superior animals as breeding stock. Furthermore, seldom are high carcass weights achieved, due to the ongoing demand of *Fa'alavelave* ... Beef production in the village sector is limited by ... continued slaughter of the best animals, which is likely to decrease the genetic potential of the village herd" (Lincoln International, 1991a:5,6 and 1991b:9,11)

"Before caveats were signed by new owners preventing their slaughter, a proportion of the cattle distributed were almost immediately used for *Fa'alavelave* purposes (p14) ... It is estimated that of cattle slaughtered in the village sector, 80-90% are slaughtered for *Fa'alavelave*. There is no particular value of young female cattle over other classes of cattle for this purpose (p18)" (Lincoln International, 1991b)

These statements are not sourced or referenced. No cultural studies are included in the reference list. Their probable source was a personal communication or a previous project document. Much of the personal communication will have been with educated Samoans who have the same views described above. Lincoln International did, however, recommend that project objectives should be to "increase the probability that cattle production in target villages will rise above the needs for *Fa'alavelave*" (ibid, 1991b:22) rather than attempt to totally discredit *fa'alavelave* and hope they will go away.

Lincoln International (1991b) recommended a 'heifer retention scheme'. The need for such a scheme was based on the assumption that heifers were being slaughtered. In their cost benefit analysis of a proposed heifer retention scheme (1991b: appendix) Lincoln International assumes that 20% of heifers distributed will be lost each year due to culling, sale and for *fa'alavelave*. Cattle that are lost to *fa'alavelave* are assumed to be losses at market value. Assuming such losses severely impacted on the Internal Rate of Return. The conclusion was that "on financial grounds this project is considered to be non-beneficial" (1991b: appendix).⁶

From this survey of the literature relating to the development of the smallholder cattle industry in Samoa, several specific assumptions can be identified:

1. Samoan cattle farmers do not understand the commercial value of their cattle
2. They farm cattle primarily for *fa'alavelave*
3. The majority of cattle slaughtered are for *fa'alavelave*
4. They do not discriminate when choosing which animal to slaughter
5. They kill the breeding stock (heifers and cows)
6. They choose the largest or 'best' animals

This thesis, then, aims to test these assumptions. However, it is suggested that these assumptions also indicate more fundamental beliefs. Specifically, in a closer examination of accepted views, based on the literature and many conversations with urban-based Samoans and expatriates, three central assumptions which are believed about Samoan culture in relation to cattle can be identified (Maiava, 1993), and summarised as follows:

First, *fa'alavelave* are the problem. The inclusion of cattle in these traditional exchange ceremonies, which will be fully described in Chapters 4 and 5, is generally believed to be the most significant obstacle to the development of a smallholder cattle industry, and one of the major reasons, if not the main reason, why cattle numbers in the smallholder sector are believed to be static or declining.

Second, *fa'alavelave* are of no value. That is, they are of no use, they waste resources and occupy time that could be more profitably spent in productive activity. They have no positive role to play in a modern Samoa and it would be best if they were stopped. The implication here is that Samoans do not know what is good for them and do not have any commercial sense.

Third, farmers kill the heifers, the most important animals for increasing cattle numbers, for *fa'alavelave*. They do not discriminate and do not behave rationally. They do not manage or plan, only choosing the best for today's need while giving no thought to the future.

There is also a fourth assumption: the belief that Samoan agricultural production has remained communally based. This has led to recommendations that cattle be farmed communally. For example Farrell and Ward (1962) recommend communal cattle projects. Ward and Proctor (1980:272,273), while acknowledging a tendency for communal cattle projects to disintegrate, recommended 'collective herds' in 'collective ranches' in order to

achieve economies of scale while retaining individual ownership. The Rural Development Programme, which will be discussed further in Chapter 7, under which village groups received cattle, was based on the assumption of communal production, and Lincoln International (1991b) also recommend a village cattle herd development project.

These four views are not based on research, but echo the prevailing paradigm that interprets cultural activities as constraints on development, sees Samoans as traditional and resistant to change, and does not credit farmers as active, rational decision makers. This thesis sets out to test these four assumptions.

3.4 The Emergence of an Anti-Thesis

In recent years an alternative view of the role of Samoan culture in development has emerged in which Samoan culture is seen as a vehicle for and motivator of development. This antithesis began with the work of Pitt (1970) who argued that, rather than being able to make no extra gain from putting extra effort into agriculture, many *matai* were able to enhance their reputations and prestige by successful cash cropping, and that success in agriculture is correlated with success in both social life and other business enterprises. While echoing the importance placed on entrepreneurial activity in modernisation theory (Hoselitz and Moore, 1963), this view portrays Samoans as active rather than resistant and passive.

O'Meara (1990) developed the antithesis further. His boldness in taking an opposite view to those taken earlier (with the exception of Pitt (1970)) is explained by his application of the scientific method (O'Meara, 1990a) and lack of preconceptions or expectations in his research. In his fieldwork he has sought to understand the view of the village planter, examining 'what is' rather than a predetermined 'what should be' (which originates in the modernisation world view) which biases much research in development studies.

But O'Meara was also fortunate to be doing research in the post-modern era. He had an alternative model to inform him in which the image of village farmers had been transformed from the irrational to the rational. Add to that his personal empathy for things Samoan and one can understand him writing:

"The ethnographic and economic data I have presented help explain many actions of Samoan planters that previously seemed peculiar or appeared to indicate that they fail to act in their own economic self-interest (p217) ... There is nothing strange or irrational about Samoan planters - whether in their economic endeavours, their social affairs, or their personal lives (p230)" (O'Meara, 1990)

In 1962 Farrell and Ward, echoing modernisation theory, had written of the need for a social revolution in order to achieve a revolution in agriculture (Farrell and Ward, 1962:237). O'Meara (1990:162) argued that such a social revolution has occurred endogenously, but without an agricultural revolution occurring as a result, not because of limited wants but because of external economic obstacles. Both acknowledge change but they attribute it to different sources and centres of origin. Farrell and Ward attribute it to Western influences over a long period of time (that is, change from without) and identify it as change away from Samoan culture, towards Westernisation and Western attitudes and behaviours, which is in accordance with modernisation theory. O'Meara, on the other hand, identifies it as change from within, culturally determined change, that modifies but retains traditional culture, rather than moving away from it:

"While Samoans often resist changes imposed from the outside, they have also shown an ability to modify their culture from within to adapt to changing times (p75) ... the change in tenure systems was not caused by any outside agent, but was entirely endogenous (p89)" (O'Meara, 1987)

Likewise historians such as Davidson (1967) and Meleisea (1992), who are perhaps more able to interpret cultural change over a longer time period, imply that the observers may have been fooled all along, that apparent conservatism had an entirely different purpose:

"traditionalism evolved defensively, as Samoans tried to resist external domination and to assert their own worth and dignity" (Meleisea, 1992:5)

Like O'Meara's interpretations, this is consistent with the third paradigm.

The most recent author to examine the role of Samoan culture in development is Ronnås (1993). Illustrating how academic thinking has completely changed in the last decade Ronnås concludes:

"In spite of its reputation as the last stronghold of Polynesian culture, *Fa'aSamoa* has demonstrated a considerable adaptability to changes in the economic environment over the past half-century, and it may be argued that it is much less of an obstacle to economic development today than is commonly believed (p349) ... *Fa'aSamoa* ... does not constitute any absolute obstacle to economic development and it is not the main culprit behind the stagnation in agriculture (p351)" (Ronnås, 1993)

However, he argues that development practitioners have not caught up with this change in thinking; that there is still "an apparent preoccupation [by development planners] with social and cultural impediments to economic development" (ibid: 356) and implies that this distracts attention from the need to re-focus on economic, technological and institutional factors, including support services and downstream linkages (markets and prices). Here he echoes O'Meara and even Pitt. He concludes: "Placing the blame on social and cultural factors would seem to be not only unhelpful, but also inappropriate" (ibid: 359).

In this antithesis, then, *fa'alavelave* are seen differently. That is, *fa'alavelave* would be seen as providing motivation for cattle development, a market for beef and a wide distribution of quality protein in an otherwise protein deficient diet. Another interpretation is that the non-acceptance or disapproval of *fa'alavelave* allows them to be blamed for a lack of progress elsewhere.

O'Meara (1990) offers another interpretation, especially during the years when cattle were highly subsidised:

"considering both social and economic costs and benefits, slaughtering the cattle ... may have been [a] judicious decision. The owners stand to make considerable social gains by giving away the livestock, and since the livestock were essentially gifts to begin with, on what grounds could the owners deny the requests of their relatives to share in the windfall? On the economic side of the

equation, the benefits of retaining the animals for breeding stock were probably much less than the urban donors supposed. Village cattle mature very slowly, and they are often lost to theft, disease, and poor fencing. Because of the humid climate, fencing itself requires constant maintenance. Once slaughtered, the cattle bring only a modest price" (O'Meara, 1990:220)

In this chapter we have examined the interpretations of the role of Samoan culture in development and the establishment of an orthodoxy of accepted wisdom (which originated in the reification of the sociological concept of functionalism). This meant Samoan culture was seen as an obstacle to development. Some of the ways this has been perpetuated have been suggested: by processes of selection, distortion, and repetition without empirical testing or research.

With regard to cattle, this was then interpreted and disseminated in policy recommendations and implementation. The distrust of culture was one of the reasons that aid funding for cattle development was directed into a large scale commercial government enterprise (WESTEC). The view of Samoan culture as unchanging and communal in productive activities meant that aid for the village sector was directed into communal cattle projects (The Rural Development Programme). Aid cattle did go to individuals more and more as demand increased but, it could be suggested, the proportions would have been different if the beliefs about culture were different.

Much of what became accepted wisdom about Samoan culture is consistent with modernisation theory, or what could be interpreted as a modernisation perspective. However, an antithesis has begun to emerge in the work of Pitt, O'Meara and Ronnås which interprets Samoan culture not as a constraint but as motivating, dynamic and evolving. Likewise some expatriates I talked with in Samoa, for example UNDP and FAO personnel, were becoming more accepting of Samoan culture and more prepared to work with it. This antithesis has the characteristics of a people-centred model of development, acknowledging that Samoan farmers are knowing, active and capable.

Chapter 4 examines Samoan culture, especially those aspects that are relevant to assessing the role of Samoan culture in the development of smallholder cattle farming in Samoa.

¹ Fleming and Hardaker (1995:70) continue to argue that the traditional system in Samoa will weaken as the younger generation pull away from it.

² For example, "In 1979 the World Bank approved US\$8 million under an IDA credit for the development of the WESTEC estates on Savai'i" (FAO, 1990:7).

³ However, in 1994 Fairbairn et al., argued that development objectives should "maintain the role of the village as the principal focus of development" (Fairbairn Pacific Consultants et al., 1994:3).

⁴ Christensen, however, was able to conclude "the successful [Samoan] farmer is the one who achieves his objectives – whatever he conceives them to be" (Christensen, 1979:19).

⁵ The figure of 30% given by the WESTEC manager can only be a personal estimate. The quote as referenced (on page 55 of Ward and Proctor (1980)), cannot be found. It must have been in a draft.

⁶ New Zealand (MFAT) withdrew their contribution to cattle development in Samoa shortly after this, largely on the basis of the failure of the Brucellosis Eradication Programme, and so these recommendations were never implemented.

Chapter Four

Understanding Samoan Culture

4.1 Introduction

An idealised depiction of culture suggests that culture is a very holistic concept which sees society as an interconnecting whole. The complex pattern of culture has three dimensions: the cognitive, normative and connotative. That is, thinking, judging and acting, or to put it another way, beliefs, morals and customs (Hoogvelt, 1978; Mair, 1984; Worsley, 1984; Hill, 1986).

First, culture provides everyone with a cognitive map, an intellectual logical model which describes and explains life and reality, the natural and social worlds and all their component parts, and provides a way of organising our thinking. This world view or pattern of thinking tells us who we are, how and why we differ from others and therefore allocates social categories and provides collective identity, psychological security and orientation. In the process of perception everything is compared to the cognitive map and categorised according to its categories.

Second, all the components and categories of the cognitive map are evaluated, resulting in a complex hierarchy of values. Thus the components are also normative, they not only have a logical meaning but also a social meaning as everything is judged along a scale from good to bad. These values are learned during socialisation, and are absorbed and institutionalised, forming the basis of society and a relatively coherent and binding moral system.

Third, knowledge, beliefs and values give a design for living via the social system which mediates and translates values into prescriptions for action. In other words values are expressed in behaviour, behaviour expresses values, and there is a logical connection

between the two. The result is customs, a framework for social relationships, a code of proper socially acceptable behaviour, laws, and a shared way of life. Personalities can modify the prescriptions for action within defined limits; conformity is publicly rewarded and disapproved behaviour penalised by negative sanctions.

However, a wide range of behaviours may be found within any one cultural framework, as personal factors, interests and conflicts influence individual behaviour. Culture is not a straight-jacket even though it is a closed system. Within it there are conflicting interests and values as people constantly respond to new situations. Cultures offer a range of resources; a pool of thinking which can be unconsciously called on to guide behaviour.

The essential essence of culture is that it is that which is ingrained. It is never questioned or thought about. Its power lies in the lack of awareness of alternative behaviours or values. Internal conflict can occur when interaction with other cultures creates awareness of alternatives.

Cultural values influence what is produced and how and to whom it is distributed and consumed. The technological means and institutions necessary for this are therefore also part of culture. The resource base and level of technology also influence culture by setting limits on possibilities. In other words cultures involve adaptation to the environment.

Cultures are also functional. That is, they work. Reciprocity, for example, an integral part of Samoan culture, is a custom that functions to ensure that all members of society have at least their minimum needs. In addition, however, it is a manifestation and expression of the value placed on each member of society. Thus reciprocity continues in good times as well as bad. Customs, then, are not only functional but also value-laden.

Cultures are not static but dynamic, resourceful and flexible, providing orientation, identity and motivation. As something learned, culture is a legacy, a collective heritage. But it is also adaptive and innovative. These two apparently conflicting concepts can be reconciled by recognising cultures as cumulative. Their future depends on them remaining functional in changing circumstances, often by changing or adopting change and by providing ways for conflict to be managed or resolved. The degree to which those within a culture can innovate and survive technological and social change without losing their cultural identity may be a

key to and measure of the success of a culture. Some cultures are more amenable to change than others.

Many studies of Samoan behaviour and culture have been made, probably thanks to the infamous study of adolescence in Samoa by Margaret Mead (Mead, 1928). In this sense, the student of Samoa is very fortunate. Interest has been sustained in recent years by the controversy over Mead's findings which were refuted by Derek Freeman in 1983 (Freeman, 1984). This led to further discussion, critiques and defences (Holmes, 1987; Caton, 1990).

Many studies have been made on change and transition in Samoan culture and behaviour. Some have argued that change occurs very slowly, others that it is in fact a culture that is in considerable flux and therefore makes a fascinating case study of culture in transition. This can be seen in many areas: social organisation (Fitzgerald and Howard, 1990), health (Baker, Hanna and Baker, 1986), in entrepreneurial and economic activity (Fairbairn, 1988), politics (Meleisea, 1992) and as a result of emigration (Shankman, 1976).¹

This chapter introduces Samoan culture. Rather than attempting to be all-encompassing or definitive, those aspects of culture which I believe have a direct impact on understanding the role of cattle in Samoan culture and the role of Samoan culture in cattle development have been selected. First is the role of the family, encompassing in particular the socialisation of children and the parent-child relationship, which is vital to understanding the contribution of cattle to parents' funerals.

Together with the importance of status and the consequent competitive nature of Samoan society, this also explains the origins of the stresses and social pressures involved, the emotional conflict and ambivalence, and negative behaviour towards cattle such as stealing, as well as the enjoyment and satisfaction gained from the culture. It also explains the strategies farmers form in managing their herd and the decisions they make about them, and the balancing of social and material ambitions in a context of social change. Ultimately the purpose of this chapter is to provide the deeper understanding of culture necessary for determining whether Samoan culture is a motivation or a constraint in the development of smallholder cattle farming in Samoa, which is discussed further in Chapters 5 and 6.

The following discussion draws on writers who have studied Samoan culture in depth such as Freeman (1984) and O'Meara (1987,1990). However, in all cases I have critically tested their insights using the sieve of my own experience.

4.2 The Importance of Family

In seeking to understand Samoan behaviour many writers begin with rank and status as the most important underlying feature (e.g. Freeman, 1984). On this I disagree, and suggest that to understand Samoan culture is to understand that the family (*aiga*) motivates all behaviour, including purposes involving rank and status. All of a Samoan's interest and emotion is centred on his or her family, and from there to the family's place in the community:

"It is difficult for someone steeped in Western individualism to grasp the Samoan idea that the smallest political unit is a family group. The family is regarded not as a plurality of individual opinions, but as a single political organism" (Ala'ilima and Ala'ilima, 1968:13)

Self-esteem is related to family position and status, and to be a member of a well respected family, socially well located, is a universal goal:

"Samoa contained no proletariat, none who could not take pride in their family connections" (Davidson, 1967:29)

Traditionally it was the large extended family (*aiga potopoto*) that was the centre of Samoan life. However, observers agree that fragmentation of the extended family has been, and is, occurring. The modern economy and cash cropping, changes in land tenure, the splitting of *matai* titles and reduction of the political power of *matai*, and migration and repatriation of remittances to individual households, all allow immediate families much greater independence from the extended family. Many of these changes are concurrent and mutually causal rather than the result of cause and effect (with the exception of the modern economy) (O'Meara, 1990).

The family unit which is the focus of this discussion is the immediate family (*aiga*). This is the most important social unit in Samoan culture even if it is geographically dispersed with

some members overseas.² The immediate family may be quite large and includes adult siblings, their spouses, children and parents. It may extend out one more generation and include parents' siblings, first cousins and their children. It includes several households which, although economically independent in terms of production and income, will pool together to care for their parents and to contribute to *fa'alavelave*. It is the household (*fua'ifale*), however, which is the unit of production. It is the household that pools its resources and income, spreading and diversifying its sources of income.

This is quite different to the traditional extended family as a unit of production but this change has been well documented and is related to other changes in the move to individualism and changes to the *matai* system (O'Meara, 1987,1990) as we will see later. However, this is better understood by anthropologists than economists and planners. The relationship and links between the immediate and extended family are still maintained as insurance against difficult circumstances and for reasons of affection. *Fa'alavelave* play a vital role in maintaining that relationship.

Within the immediate family it is the relationship to parents which is most important. The relationship between children and their parents is critical to this thesis because it is to parents' funerals that most cattle are contributed in *fa'alavelave*. In order to understand why this is so we must understand the strength of this relationship and its origins.

The first thing Samoan children learn is to obey their parents. This message is learned at home and from the church in the Bible verse:

"O outou le fanau, ia outou fa'alogo i o outou matua ... ina ia manuia ai oe, ma ia e nofo tulu'i ai i luga o le lau'ele'ele" ("Children, obey your parents ... that it may go well with you and that you may enjoy long life on the earth" Ephesians, 6:1,3)

This verse is taken literally in that Samoans believe that if they do not obey their parents they will not have a long life. Obedience is manifested in the numerous chores children perform, fetching and carrying without question, and serving their parents. Once a year children have the day off on White Sunday when they are served first. At a special church service however, they are likely to be admonished not to get used to such luxury because

tomorrow they will have to go back to obeying and serving their parents again. They will be reminded of all that their parents do for them and how grateful they should always be to their parents. On birthdays children are again reminded to obey their parents. Radio birthday calls frequently repeat the message "Happy birthday, be good and obey your parents". The message is repeated and reinforced throughout their young lives, together with the message to love their parents. Obedience and love are equated at an early age.

Until babies are about two years old they are greatly treasured, indulged and cared for very well. They are loved and nurtured and bond closely with their mothers. However, at around two years of age, when children begin to assert themselves (a biological phenomenon that occurs irrespective of culture) a sudden change occurs: affection and attention is withdrawn and discipline begins (Ritchie and Ritchie, 1979; Freeman, 1984; Baker, 1986). Disobedience is punished, often quite severely, although this differs among families. This is again supported by the Bible verse:

"O le ua tu'una lana sasa, ua 'ino'ino o ia i lona atali'i, a o le ua alofa ia te ia, ua sa'ili le aoa'iga mo ia" ("He who spares the rod hates his son, but he who loves him is careful to discipline him" Proverbs, 13:24)

Freeman (1984) suggests that the shock the child has at the sudden withdrawal of love, the imposition of harsh discipline and apparent rejection at around two years of age has such an effect on Samoan children that they spend the rest of their lives trying to win or earn back their parents' love and affection. This is perhaps not as far fetched an hypothesis as it may seem, as Samoan children do certainly spend much of their efforts as adults trying to please their parents.

Samoans, while able to express love outwardly, may find it difficult to emotionally love parents who have harshly disciplined them, made constant demands on them and are apparently never satisfied despite their children's best efforts to please them. Freeman (1984) describes the ambivalence which children often feel towards their parents, both loving and hating them at the same time.³

"Samoan social organisation, then, is markedly authoritarian and depends directly on a system of severe discipline that is visited on children from an

early age. By the time this discipline begins to be imposed, the great majority of children are already bonded to their mothers. The mother is thus experienced as alternately caring and punishing. This means that she comes to be feared and hated as well as loved and longed for, a combination of emotions that, in addition to producing ambivalence, significantly intensifies the feelings of an infant for the individual to whom it is bonded" (Freeman, 1984:209-210)

The parent-child relationship is the strongest relationship of all Samoan relationships for as long as the parent lives. This is contrary to Mead (1928) and also Holmes (1987), and is a point of confusion in the literature. There is certainly strong emotional attachment although it may be of a different nature to that felt by Europeans. After marriage, a Samoan's emotional attachment to their parents is stronger than that to their spouse, whether husband or wife. Children continue to serve their parents, expressed as loving their parents, until their parents die. Those who are Western educated feel this pull equally. Those overseas worry about "who is looking after my parents". Children feel that they must repay their parents for "bringing them up and giving them everything". These feelings are genuinely and intensely felt.

The strong influence of parents over their children does not seem to be diminishing as the *matai* system is diminishing. In fact it may be actually strengthening in response. Love of parents is expected by the wider community; one must be seen to love one's parents. But more importantly, according to traditional Samoan custom it is children who support their parents both financially and physically when they are old. This is something that parents do not want to change.

In adult children love and giving is equated. As soon as a child is able to earn money, all that money is given to their parents. On the one hand parents demand it (although this is not necessarily spoken) but on the other hand children expect or even want to give it. The equating of love and money or material goods is strongly part of Samoan culture. Generosity expresses love, and love is frequently talked about. If someone gives a material gift they are thanked for their love.

The process of socialisation during childhood teaches children obedience to adult authority, appropriate behaviours of respect and deference, and social roles and responsibilities. The

methodology reinforces the learning of status relationships. In addition children learn co-operative behaviour, to be communal in outlook and behaviour, to share, be generous, and to work hard (Baker, 1986). Curiously, Goodman (1990) relates childhood discipline to the creation of the 'happy Samoan', which from the time of Mead has been a common image. Indeed, because Samoans are intensely communal they need social skills, including personal flexibility to allow them to live together in harmony and 'go with the flow'. These skills are taught from childhood. Being cared for and surrounded by many people from the earliest age creates very socially orientated people. To be by oneself is considered strange, for surely that person must be lonely.

While being punished, Samoan children must suppress both their anger and distress. They must not question or answer back or even cry. Thus in learning obedience children also learn to suppress their own feelings and emotions outwardly:

"the child [learns] two lessons he will find valuable for the rest of his life: to control himself and to repress his disagreeable emotions" (Goodman, 1990:137)

More ominously, Freeman argues that:

"forced to suppress their indignation and inhibit their crying Samoan children are subjected to considerable psychological stress. Further, being forced so frequently to assume an outward demeanour fundamentally at variance with their emotions produces in Samoan children an isolation of affect which is of quite fundamental significance in the formation of Samoan character (p208) ... deep-seated ambivalence [is] generated in Samoans by the form of the punitive discipline to which they are subjected in infancy and childhood, an ambivalence that is basic to the structure of Samoan character (p211)" (Freeman, 1984)

Ala'ilima and Stover (1986) note that the range of responses to the expectations learned in childhood include first, obedience, even to the point of overburdening oneself, second, rebellion and third, manipulation or thinking up ingenious accommodations of the situation. These become coping strategies in adulthood. Inward rage may lead to violent outbursts

(Gerber, 1985) or even suicide. Suicide has long been related to 'anger within the family', particularly parental discipline or 'scolding' (MacPherson and McPherson, 1987).

Howard (1986b) and Ala'ilima and Stover (1986) identify families as one of the main sources of stress to Samoan individuals. This is particularly in terms of the financial demands made on adult children and the demand for contributions to *fa'alavelave*. But Howard also concludes that, paradoxically, families are a 'coping resource' that enables Samoans to cope well with stress and that Samoans do rely on their families to cope with stress:

"Social strategies based on kinship rights and obligations and reciprocal exchange are the primary means by which Samoans cope with problems. Furthermore, in many instances it is the family group rather than the individual that formulates strategies" (Howard, 1986b:400)

However, he also notes:

"the predominant Samoan coping strategy - relying on kinsmen - is one that has costs as well as benefits (p416) ... received support is generally offset by the obligation to provide it, and for some the burden of obligations may outweigh the benefits accrued (p398)" (Howard, 1986b).

But the behaviour learned goes beyond the family into the community. Strict obedience to parental authority, learnt first in the home, teaches obedience and respect for other authority in the village or community. Love and generosity to family teaches generosity in the wider family and community.⁴ The concepts of obedience to authority, obedience and love, and love and giving, are all intertwined but also give rise to internal tensions creating ambivalence towards not only the family but the entire culture.

"the punishment of children in Samoa ... is imposed ... with such dominance as to produce in most Samoans a profound ambivalence toward those in authority, with respect and love alternating with resentment and fear. Because of this system ... Samoan character ... has two marked sides to it, with an outer

affability and respectfulness masking an inner susceptibility to cholera and violence" (Freeman, 1984:275-276)

Certainly the constant obligations to share, serve and obey add to the frustrations often felt (Gerber, 1985). The culture, however, does have some ways in which these pent-up antagonisms can be resolved in ritualised ways or other socially acceptable behaviour. Youths, for example, often express themselves by wearing outrageous articles of clothing or hairstyles. If the stresses are not resolved they can result in unritualised aggressive outbursts which are severely sanctioned. The restoration of harmony and maintenance of harmonious social relations is very important.

Such emotional ambivalence starts young and is thus accepted as quite normal. It sets the scene for continued emotional ambivalence throughout life and feelings of ambivalence towards many things including families, culture and cultural practices. Adult behaviour continues the behaviour learnt in childhood such as the hiding or disguising of true feelings, which nevertheless are deeply felt and at times result in sudden outbursts when they can be held no more. Usually, however, they are expressed more subtly when someone seems to comply with expectations but in reality does not. It is very confusing for expatriates when someone appears eager to please and agrees to do something but then simply does not do it.

Confrontation with authority is never direct (except in extreme situations) but occurs nevertheless. In teenagers this may take the form of being *musu*. That is, instructions are complied with to the minimal extent possible, with only just enough compliance to escape punishment and with a reluctance shown only by body movements, never audibly. Another strategy is the telling of lies, whether to other Samoans or expatriates. Deception is a common aspect of Samoan behaviour, even within families. O'Meara, for example, gives the example:

"I recorded several instances of young men who headed off to their family plantations in the morning, but worked for pay instead on a neighbour's land. They did not report that income to their families when they returned in the afternoon" (O'Meara, 1990:168)

The requirement for the appearance of compliance means being very inventive in making up plausible excuses. In other words there are ways of working around authority. With regard to cattle that are expected to be contributed to *fa'alavelave* for example, excuses can be made as to why that is not possible.

Another response is the redirection of latent aggression. As aggression may never be shown towards parents or elders, it is often redirected towards those lower in the social order. Sometimes this may be directed towards cattle either at random or as a result of jealousy, when cattle are injured or fences are deliberately damaged. Although these problems can flare up, they are minor in comparison to stealing which also has cultural origins. From the practice of deception and hiding the truth, it is only a short step to stealing, a problem often faced by cattle farmers.

To summarise this section, these relationships and forces which originate in the family and through the processes of socialisation are critical in understanding the role of cattle in Samoan culture. By understanding the emotional strength of the bond in the parent-child relationship, the equating of love and giving, and the social importance of generosity and demonstrating love and respect, we can understand why cattle are contributed to parents' funerals more than any other *fa'alavelave*.

4.3 Rank, Status and Social Change

The discussion above has indicated that rank and status are fundamental in Samoan culture. It has been argued that Samoans are obsessed with rank (Freeman, 1984:131-140). The *matai* system has been described in detail by many authors (Holmes, 1957; Freeman, 1984) and has undergone considerable change in recent decades which is related to other changes that have also been occurring: changes towards individualism, a reduction in the importance of the extended family, cash cropping, and changes in land tenure (O'Meara, 1990).

Matai are to be accorded respect at all times with outward acknowledgement of their authority and position. However, their power is much less than it used to be. One reason is the splitting of titles. Since only *matai* could vote in general elections, *matai* titles were often split for political purposes in the decades before universal suffrage was introduced in 1990.

Titles are now so common that it is likely that most adult men will receive a title. In rural areas such as *Savai'i* 75 percent of all men 21 years and older are *matai* (O'Meara, 1990:151). The national average is now about one *matai* to every eleven or twelve people. Many *matai* have two or even three or more titles. Numbers of women *matai* are slowly but steadily increasing, although many women offered titles prefer to pass them to their sons. In other words, more are offered to women than are accepted.

"The rapid spread of *matai* status is paving the way for the individualization of contemporary Samoan society. It is enabling, speeding, and easing some of the social, economic, and political changes that many Samoans desire" (O'Meara, 1990:154-155)

Traditionally, the power or authority (*pule*) of *matai* lay in their right to control the use of the land that belonged to their particular title. In addition they were able to control the labour of their extended family to work on that land, and they controlled the income from that land and its distribution. However, that power has been slowly whittled away with the greater desire by those who actually do the work to keep the income from cash cropping for their own immediate families. The mechanism has been changes to land tenure, together with other forces increasing financial independence such as off-farm incomes and remittances from overseas, both of which are retained by households. Thus *matai* now have very little control over production by the extended family and their economic role is virtually obsolete.

In addition to the *pule* of their title, the traditional power of *matai* was also based on the principle of *tautua* or service of older, senior family members, especially by untitled men (*taulele'a*) (O'Meara, 1990:162). The motive for these younger men was that through service and obedience they could earn a *matai* title for themselves, and were thus able to tolerate their burdens of hard unrewarding work in the knowledge that one day they would be served by others and would be able to take it easy. Thus it was an investment in the future, something traditional societies are often thought not to do, and it worked well in a subsistence economy.

However, if younger men are not absolutely sure that they will reach that goal their motivation decreases. The cycle must continue. But as *matai* titles proliferate and lose their

authority, and families decrease in size, limiting the pool of potential servers, young men cannot be as sure that they will be able to command the service of the next generation in their old age (even though they are more likely to gain a title). Thus they are becoming more reliant on their own children, and the parent-child relationship is increasingly emphasised. As a result of this, however, parents are very willing to invest in their children, whether in their education or in sending them to New Zealand or elsewhere overseas. It is now possible to invest in the future in other ways, other than *tautua*.

"The cycle of *tautua* has been broken in the minds of many young people today. New technology and a market economy make individual production, profit and accumulation of wealth possible. Many young people seek their futures in wage labour ... and they doubt that their own service will ever be repaid by a younger generation. In these circumstances, they no longer serve gladly" (O'Meara, 1990:162)

This situation provides the potential for conflict between the generations as older *matai* continue to expect *tautua* from younger relatives. We will see that this can happen when *matai* exercise authority over cattle which the younger generation has worked to produce, especially by requesting a contribution of cattle for a *fa'alavelave* from a son or nephew.

Despite the decline in their economic role, the social and political roles of *matai* remain. In the village the council of *matai* (*fono*) retain the political power to sanction socially and culturally unacceptable behaviour. Traditional methods described by Freeman (1984) were often severe and humiliating (such as being trussed up like a pig), depending on the offence. These days most punishments for crimes ranging from adultery to not showing proper respect to *matai*, include fines.

These fines now regularly include cattle. This is the last remaining right of the village as a whole to consume the production of individual households on demand and one of the few remaining ways, apart from church activities and sports clubs, in which the community (as opposed to the extended family) co-opts the fruits of household production. The fines, often in the form of meat, are distributed throughout the village members. The courts in Apia, work in parallel with this system, which is recognized in law, and take into account such village punishments when sentencing those guilty of crime.

"Although the productive basis of the extended family has weakened, the social basis of the extended family is still strong in Samoa. This can be seen in the elaborate *fa'alavelave* system of inter- and intra- *aiga* giving displays at life crisis events which have flourished with the increase in incomes ... In fact, the recent elaboration of the *fa'alavelave* system may in part be a response to the reduction of productive co-operation. In the absence of the need for co-operation in production, the social aspect of the extended family has been emphasised to help maintain its solidarity, which is still important for security. The result is that while the productive sources of income are increasingly controlled by individuals, the wider social network is still maintained as a source of economic security, as well as pleasure, power and prestige" (O'Meara, 1987:90-91)

It is *matai* who organise the pooling of resources from the extended family for combined contribution to *fa'alavelave*, and their redistribution during and after the main event. *Fa'alavelave* function to maintain and enhance the status of *matai* and are serving to reposition their power-base in society. In this function their authority, sense of importance and the bearing of great responsibility remains:

"One of the great successes of traditional Samoan society is the creation of a system where many people share a measure of dignity, power and importance. As Holmes (1980) notes, this creates a broad base of individual support so that changes are likely to be incorporated into the system rather than overthrow it" (O'Meara, 1990:155)

Nevertheless most households, with the splitting of titles, now have their own resident *matai*. It is now the household rather than the extended family that is the unit of production. Further, with the strengthening of the parent-child relationship, relative to the relationship to the rest of the extended family, it is now the desire of parents to ensure that their property and rights are passed directly to their own children rather than other members of the extended family. This is one of the reasons for changes in the land tenure system whereby land that enters individual ownership is inherited directly by the owner's children. Landowners want to make sure that their children have the resources to be able to care for

them in their old age (O'Meara, 1987,1990). This is an example of tradition motivating change.

O'Meara has examined these changes closely, especially with respect to land tenure. While acknowledging that the Western example has been influential in an indirect sense as Samoans have been exposed to Western ways for more than a century, he concludes decisively that the changes he has observed are directly the result of the desire for change by Samoans themselves.

Of outside attempts at changing the land tenure system he says "Colonial administrators tried several times to introduce individual tenure in Western Samoa, but without success" and concluded "the change in tenure systems was not caused by any outside agent, but was entirely endogenous" (O'Meara, 1987:89). This thesis will later draw parallels between changes in land tenure and the smallholder farming of cattle.

What is interesting is the way in which Samoans used traditional cultural principles to justify the changes they were making to their own cultural practice. With respect to land tenure O'Meara (1987,1995) showed how old rules were modified to allow changes, creating a new system that was significantly transformed while appearing on the surface to be similar to the old one. For example, two of the traditional rules that are still applied to land tenure are, first, land belongs to the family (under the *pule* of their particular *matai* title) of those who cut and plant it and, second, only a *matai* can hold *pule* (authority) over land.

Traditionally it was the *matai* title, not the person, that had the *pule*. That is, a *matai* only had *pule* over the land that traditionally belonged to his title. Now, however, it has become accepted that any *matai* title may be used to claim land. That is, if an untitled man clears land, the land remains under the *pule* of the *matai* he is serving. But as soon as he gains his own title, any title, the *pule* is transferred to him. This has wide implications because, together with the proliferation of *matai* titles, almost anyone can legitimately claim land if they clear it. Together with the new rule that land can be held by individuals and inherited by direct descent, a significantly different system of land tenure has been created. However, the retention of the rule that only a *matai* can hold *pule* over land gives the new system cultural legitimacy.



Plate 3. Members of a Samoan immediate family. These young cousins learn to respect and obey their parents from an early age.



Plate 4.
Two newly conferred *matai*.



Plate 5. A meeting of the village *matai* council (*fono*).



Plate 6. Women and untitled men voting for the first time in 1990.



Plate 7. Weaving fine mats together in the Women's Committee *fale* for individual household use.



Plate 8. Consumers goods are desired. Most homes have a TV and video player.



Plates 9 and 10. *Fa'alavelave* involve the formal exchange of fine mats, money, cooked pigs, beef and cartons of tinned fish.

O'Meara (1987,1995) uses the term 'customary individualism' to encapsulate the idea that individualism is now considered customary. It has been given the seal of approval by the guardians of tradition and custom. Farming cattle also, as we will see later, may be representative of increasing individualism, while also continuing to appear traditional.

4.4 Competition, Co-operation, Community and Contradictions

Samoa culture appears to have many contradictions and tensions. These include tensions between the individual and the community, between rage and obligation (Gerber, 1985), and contradictions between generosity and 'the search for money', and between old ways and new ways. Another is the contradiction found in the apparent coexistence of co-operation and competition in Samoan culture (Freeman, 1984).

Samoa is an intensely competitive society. This derives directly from the importance of rank and status which has not diminished over time even if it now has more to do with appearances than actual power. Rank pervades Samoan thinking and motivates much Samoan behaviour. That is, Samoans are constantly competing for status in many things from village beautification contests and agricultural competitions to competing displays of generosity. Acquired goods, children's educational success and success on the sports field are all skilfully used to enhance the standing of families in the community.

Such competition is very traditional and fundamentally Samoan. For example, ritualised competition is an essential part of traditional oratory where orators compete for the right to speak to a gathering. Competition provides tension much like sport. Success is admired and praised with genuine admiration but losses are felt badly and can inspire jealousy. Competition motivates, but it can get out of hand. Being overly generous in order to impress is laughed at as foolish because the glory is short-lived.

Although new things, including cattle, are adopted into competitive behaviour, the motivation is traditional; modern behaviour motivated by traditional aspirations. And while competition to give cattle to *fa'alavelave* is increasing, there is also increasing competition to have the largest herd, which provides cattle owners with a dilemma.

Competition is usually between groups (such as families or branches of families) and motivates group solidarity on a temporary basis. Within the group it motivates co-operation, the type of communal co-operation that is usually attributed to Samoans. This intra-group co-operation gives the group a competitive advantage in inter-group competition. This difference between inter- and intra-group relations explains the apparent contradiction between Samoans displaying both intensely competitive and intensely co-operative behaviour.

The most intense but subtle competition is between families who co-operate within each family for this purpose. However, co-operation within the community, while genuine and valued, is often restricted to specific social purposes or projects. Often it is related to church or school activities and is particularly used for building new buildings or similar projects which have a relatively short time-span. This is not recognised by development personnel who have a wonderfully romantic idea of villagers living in harmony and producing together. In 1962, Pirie and Barrett observed:

"An attempt was made to develop a co-operative movement which, to the disappointment of the administration, had only limited and short-lived success"
(Pirie and Barrett, 1962:93)

Even activities that appear communal are actually individuals doing the same thing together for social reasons. For example, members of women's committees get together to weave fine mats (*ie toga*) but they weave their own fine mats for the use of their own households, even if the women's committee dictates how many fine mats each household should have in reserve.

As has already been explained, production is almost never communally based. Often a group may form to pool resources to try some new venture but it is envisaged that this is just to get them started and benefits will be individually dispersed at a later date. Even if this is not envisaged at the beginning, it invariably happens as tensions rise between group members when some contribute more or less than others.

With regard to cattle, this knowledge would suggest that communal cattle projects are unlikely to be successful in the long term. O'Meara (1990) gives an example of a group of *taulele'a*, or untitled men, who began a communal cattle project:

"In 1978 they received twenty-one cattle as part of the government's heavily subsidised Rural Development Programme. The villagers wanted to split the herd into smaller, individually owned herds, but ... the terms of the project prevented individual ownership ... the original fences began to deteriorate and the communal work group proved inadequate to maintaining them ... the problem worsened, and by 1983 the herd was reduced to only a few animals" (O'Meara, 1990:173-174)

This story, as we will see later, has been repeated many times. It needs to be noted in this example that it was the incorrect assumption by project designers that villagers produce communally which ultimately led to project failure. This lesson has not been learned by development planners, however, and as recently as 1991 consultants from Lincoln International were recommending communal cattle projects (Lincoln International, 1991b).

4.5 Economic Values: Work, Income and Money; Distribution, Exchange and Obligation

It is in the area of economic values that probably the most disagreement has surfaced in the literature with statements made that completely contradict each other, as we have seen earlier in Chapter 3. Pitt (1970), O'Meara (1990) and Ronnås (1993) argue that economic development is possible within the traditional economy.

"There has been, at least in the twentieth century, a consistent effort by Samoans to raise their own standards of living (p29) ... This demand for capital goods has a solid base in *fa'aSamoa* values (p44)" (Pitt, 1970)

It may be suggested that many Samoans are quite materialistic and like to show off their possessions. The acquisition of material goods and visible decorations to houses, for example, enhance the pride and reputation of the family. In this the benefits of capitalism and traditional purposes are combined. Numbers of televisions and videos have increased rapidly and recently, as electricity has been extended and is now available

twenty-four hours a day in most villages. Refrigerators and freezers have become the latest item to acquire.

Samoans recognize that obtaining money is the key to these pleasures. However, they are broadminded about how that may be achieved and do not limit themselves to earning that money by conventional means. Labour, work and money are not necessarily directly linked or at least are only one option.

"Samoan adults, especially *matai*, are continually engaged in what they call *su'e tupe*, "searching for money"" (O'Meara, 1990:185)

This takes many forms: work for wages, cash cropping, business activities (monetary income); producing subsistence items (subsistence income); and weaving fine mats, creating obligation, asking for money, accepting gifts and receiving remittances (cultural income). Samoans 'straddle' the subsistence and cash economies, obtaining income from a variety of sources. Money from all the members in one household is pooled. O'Meara's research showed that village households have, on average, six major sources of cash and purchased goods income, including gifts and remittances, as well as subsistence income (O'Meara, 1990:185).

Thus Samoans see money as something to be obtained by a far greater range of means than dictated by the Western economic modernisation model, and may show considerable initiative in doing so. In times of financial need any source will do. In this way money may be shifted around as the need of the moment requires which can obscure profit and loss: profit from fishing is used to stock the shop, profit from the shop is contributed to *fa'alavelave*, return from *fa'alavelave* is used to pay school fees and so on.

Money, like other introduced technologies, has been incorporated into Samoan culture, for cultural purposes. Its function is not purely to purchase material goods or be reinvested but serves other, particularly social, purposes:

"The money derived from their heightened agricultural activity became in time a component within Samoan culture, and its handling and spending became as prescribed as if it had been part of ancient custom" (Pirie and Barrett, 1962:63)

"[Samoans] want a cash income because it allows them to have certain goods and services ... It helps them up the social ladder, and to gain political influence and authority - the real objectives" (Lockwood, 1971:209)

Many Samoans tend to consume or disperse their income rather than reinvest it in the capitalist sense. This is probably due to the fact that their incomes are relatively too small to save from and because in a hot humid environment where anything stored rapidly decays, there is no cultural precedent for saving⁵ and limited traditional preservation technology. Most importantly:

"selfishness is also thought to lead directly to poverty, since prosperity and wealth are thought to depend on the pooling of resources in concerted co-operation" (Pitt, 1970:27)

Capitalism, then, with its emphasis on apparently 'selfish' accumulation, often fails to become well established in Samoa despite much small-scale entrepreneurial activity. That does not mean however, that Samoans do not invest their money. Rather they invest it in the maintenance of social relationships and, where possible, the creation of obligation. They have also invested in education and in emigration, which has not been motivated so much to escape from the culture but to achieve culturally desirable objectives. The decision to migrate is made as much by those who stay (parents) as by those who go: their children.

Samoans are skilled manipulators and ideally prefer to be in a position where they are more obligated to than under obligation. Every exchange either creates or relieves obligation. Thus Samoans are skilled at handling and budgeting money:

"In their investment decisions, their control of household budgets, their attempts to save, and in their obvious materialism, villagers demonstrate a desire for greater incomes and an economic mindedness that contrasts sharply with popular opinions of them" (O'Meara, 1990:175-176)

Furthermore, hard work and success are genuinely admired and praised, as long as loyalty in the form of generosity is still demonstrated. Samoans like to be reassured that a successful person will not abandon their traditional obligations and become *fia Palagi* (like a European

and selfish). Hard work and success in others is talked about as being motivating to oneself. Praise is the upside to the competitive aspect of Samoan culture. Jealousy is the downside, but Samoans are used to that reaction as well.

4.6 *Fa'alavelave*

Fa'alavelave can be broadly placed in two categories. First, a *fa'alavelave* is a small disturbance in routine or a domestic crisis, a problem or a difficulty. For example it could be an argument, the need to find money to pay school fees, a flat tyre or getting into trouble with the police. Here cattle have been incorporated in these domestic disturbances as fines or as a source of quick cash to fix the problem.

For example, I was in Sato'alepai during Easter 1987 when an untitled man got drunk and punched a *matai*. The *matai* council met and fined the man, part of which was one cattle beast. The meat from this beast was then distributed throughout the village the next day.

It is almost impossible to distinguish between cattle being used for domestic *fa'alavelave* and being used for income in cases where cattle are used to raise cash, for example for school fees or airfares. It may be the level of urgency or difficulty which is the only distinguishing feature.

The second meaning of *fa'alavelave* involves a larger formal traditional occasion such as a funeral (*maliu*), wedding (*fa'aipoipoga*), conferment of a *matai* title (*saofa'i* for men or *fa'anofonofo* for women), church dedication (*fa'aulufalega*), or traditional welcome (*sua*). This involves formal exchanges of gifts. The procedure is essentially the same no matter what the occasion, only quantities differing to a greater or lesser degree.

It is this second meaning given to *fa'alavelave* which is the main focus of my research and was assumed in discussions about cattle, by myself, expatriates and Samoans, to the extent that cattle going to domestic *fa'alavelave* may have been overlooked by Samoans themselves in answering my questions. There is little detailed anthropological description of *fa'alavelave* in the literature. The exception is the excellent discussion by O'Meara (1990:156-162,201-216). O'Meara's analysis is accurate, sympathetic and insightful. Some of what follows echoes his writing but is based on my own observations.

In any *fa'alavelave* there are two groups: the visitors and the hosts. The visitors arrive in groups. These groups are almost always extended family members of the host group. Often they are related by marriage to the host household and that connection (the connection between the two families) is strongly emphasised. For example, at a funeral of an elderly person visiting groups will include the families of the spouses of their siblings and their children. Another connection may be between birth families and the family into which their child was adopted.

They will also include groups who live under the same title (since titles are split) or related titles. These may be close or distant relatives who live close or far away. People will identify with the title of the household in which they live (for example have married into). However, as well as groups connected by marriage or titles there may also be groups of *matai* (such as the village *matai* council [*fono*]) or groups of work colleagues or sports clubs. The host group is usually immediate family members in a funeral, or a congregation, or members under the umbrella of a specific *matai* title.

Sometimes, at a funeral those at the edge between an immediate family and an extended family will identify differently. So, for example, a brother and a sister may end up in different groups. This will be for different reasons such as marriage, adoption, distance, where help is needed, making up the numbers or emotional reasons. Some will even swap groups during the day because the same procedure is repeated several times between different visitor groups and the same host. Thus at one point someone who is part of the host group may join a particular visitor group with whom they identify more closely, and vice-versa.

Visitor groups often travel from some distance, including overseas. They may come from different places and will gather as a group in the previous few days. However, in the case of funerals, if the body is not held in the mortuary to await the arrival of visitors from overseas (which happens more frequently now), the body must be buried quickly, so arrangements must be made quickly. Radio announcements ensure all who need to know do so.

The visitor groups also represent other people who are unable to attend but who have still contributed. In fact this group will have already put a great deal of effort into preparing their presentation, collecting money and fine mats from among its members and their own

families. Fine mats will have been retrieved from under mattresses and previewed to ensure they are acceptable.

Likewise the host group will have put considerable effort into getting ready. During the previous day fine mats are checked and counted, food supplies bought on credit, and cattle located and selected for slaughter. That night meetings will have been held and discussions will have taken place in which contributions are gathered and decisions made about how many pigs and cattle are required. What proportions of cash and fine mats will be returned in the exchange will also be decided, and food preparation and all other necessary arrangements organised. Early the next morning pigs will be cooked.

On the day, visitor groups arrive throughout the day on the *malae* (large grass area in the centre front of a village), and wait if necessary for the group before them to finish before making their presentation, either on the *malae* if it is a large occasion or in a large *fale* which faces onto the *malae* and is specifically used for such purposes. The two groups sit at opposite ends of the *malae*. The space in the middle allows for the gifts to be paraded and also means that the orators have to call out very loudly so that all can hear. (In a large *fale* they sit at opposite ends of the *fale*). Those not speaking or actively involved in carrying and displaying gifts sit on mats on the ground. Visitor groups bring two gifts: money (cash) and fine mats. Cash in New Zealand, Australian or American dollars may be presented as well as *Tala*.

When it is their turn, the orator for the host group will first welcome the visitor group and thank them for coming, stressing the connection between the two groups. The orator has to be extremely knowledgeable because he must accurately detail these connections.

As the visitor group begins to display their gifts, their orator expresses the feelings of the group. In the case of a funeral he will express their sympathy at the family's loss and their love for the deceased and the whole family. He will also strongly emphasise the connection between the families, referring to the contribution the host family and the deceased has made to his family (for example bringing a title into that family, since titles may be passed through marriages) and their appreciation for all the host family has done for his family. He will speak of their respect for the deceased and recognition of his title as well as all the other

matai present. The gifts are also detailed as symbols of all that has been said, and hope for God's comfort for the family is offered.

Women of the visitor group open or partially open the folded fine mats while seated. Women of the host group go forward to collect the fine mats. The finest mats with special meaning (such as great affection and respect - deep emotions) are used to express farewell to the deceased. They are large and are fully opened and paraded around so everyone can see their fine workmanship. Smaller mats usually in bundles of ten, are not opened but collected and carried back by women or untitled men of the host group. Hundreds of fine mats may be given. As well as this a bundle of cash is taken (not collected) and given to the host orator or to the treasurer.

The host group always has a treasurer with a records book into which all gifts of money and fine mats are meticulously recorded. He will be a person in the family who is known to be able to take that responsibility. It may be a family member who is a pastor or school teacher for example. It may be a woman although this would be uncommon. The treasurer also records what is given back to each visitor in exchange.

The *matai* of the host group quickly decide, guided by the decisions made at the previous night's meeting, what will be given back to the visitor group in appreciation of their gift. Part of the money and a smaller number of fine mats will be given back, often including some of the large special fine mats. Behind the *matai*, women will be working furiously to count and sort bundles of fine mats which they will then carry back to the visitors as well as carrying back a bundle of cash.

But as well, the host group will give back other gifts: cartons of tinned fish, cooked pigs and, of interest here, parts of freshly slaughtered cattle. These will have been prepared the previous day or early in the morning. The tinned fish will have been bought from a local store or, if possible, a wholesaler. They may have been bought on credit, to be paid off at the end of the day with the proceeds of the *fa'alavelave*.

As these gifts are being given in return, the orator for the host group acknowledges the love and gifts given as an expression of their love and sympathy, and thanks the visitor group for their attendance. The connections will again be emphasised, with appreciation in return for

the benefits to his family bought by the connection. Depending on the nature of the connection, appreciation of the care and love shown to his family member who has married into the visitor family may be expressed for example, and gratefully acknowledged as an expression of respect of the host family title. Again, respect and acknowledgement of titles is detailed. Hope for God's blessing on the family is offered. He will detail the gifts to be returned in appreciation of the visitors' expression of love and respect. Naturally, at a non-funeral event joy will be expressed rather than sorrow, but otherwise the sentiments are similar.

Visitors are not housed communally in the Maori fashion (Salmond, 1990). After the formal exchanges are complete visitors will be given food to take away with them and some money for their 'bus fare' (*pasese*) whether they came by bus or not. Those who came from overseas or Apia will stay with their own nuclear or immediate family whether in this village or elsewhere. Some visitors may stay several days with their own families to take advantage of the occasion for a family reunion.

Food will be given served in individual portions to take away. Traditionally served in containers made from coconut fronds (*ma'ilo*), it is these days more often served in polystyrene containers. Close senior relatives or highly titled visitors may be invited to move to another *fale* and be served the same food in traditional manner before they leave, especially if they have to travel a considerable distance. The food will consist of taro, sausage, rice, perhaps some cooked chicken, bread, and chop suey (noodles with finely chopped cooked beef added). It is here that cattle enter again. Parts of one beast or even a whole beast will be used for this purpose.

As each visitor group departs another (which may have been waiting for several hours) will move onto the *malae*, usually with its vehicle loaded with gifts, to begin its presentation. The continual replacement of visitor groups usually occurs over one day from early in the morning until evening but may continue into a second day for large occasions.

At the end of the day the treasurer will present a financial report, the proceeds will be used to pay off credit and then divided up between the *matai* in strict relation to their contribution. They in turn will distribute it back to all their contributing households. Others

who helped - the women's committee members and untitled men - will also receive a share, perhaps two cans of tinned fish or \$5 each.

In 1987, I recorded this funeral in Savai'i:

"In late May, the pastor of a village on the north-eastern tip of the island of Savai'i died in Apia. When the news of his death reached the village of about 400 people, the *matai* council (*fono*) met, approximately 35 in all, to make arrangements for the funeral. They decided that each *matai* should contribute, on behalf of his family, one carton of tinned fish or a cooked pig, \$5 (five *tala*) cash and one fine mat to be held as a reserve. It was also decided that three cattle beasts (one bull and two old cows) out of the village herd of about thirty cattle would be slaughtered although there was some disagreement about this.

All of these things were to be given as gifts to the visitors who would come. The cartons of tinned fish were mostly bought on credit from a store four miles away. To feed the visitors the *matais* ordered 150 loaves of bread. Their credit came to \$3,000.

The women's committee (about fifty women) met to arrange the preparation of the food. Cooking tasks were assigned to the women of each household. Each member was also to give \$10 cash, one chicken and one teapot of Samoan cocoa. The committee bought fruit juice, biscuits, sugar and other items on credit, totalling about \$1,200.

The *matais* also decided that the lights in the village would be left on all night as a sign of respect. The village had only one pick-up available and this was commandeered to buy extra diesel so the diesel generator could be kept running. It was also used to collect lava rocks for the grave and to buy cartons of tinned fish. It made six trips in all and the owner was given three fine mats in exchange for its use.

Early in the afternoon of the third day, the body of the pastor arrived back in the village. The congregation, all dressed in white or black, lined the route into

the village up to the church. A short service was held to welcome his body back to the village and then he was laid in his house where the villagers all came to pay their last respects and comfort his widow.

The next day the family of the pastor arrived in the morning. About 300 visitors came in total and bought with them approximately \$7,000 and 600 fine mats which they presented first, as gifts to the pastor's congregation. As women of the village displayed the fine mats, carrying them around so that their quality could be seen and admired, an orator from the family spoke of the family's respect for the congregation, their love and appreciation of the congregation's good relationship with the pastor who had been there about 25 years, and their sympathy with the congregation's loss.

All the gifts were recorded by one appointed village *matai*. The *matais* decided that 20% of the money, 300 fine mats and all the cartons of tinned fish (about twenty cartons), cooked pigs (about ten), and freshly butchered cattle would, in return be given to the pastor's family to show their love and appreciation of the pastor and their love and sympathy to the family in their loss. An orator of the village spoke of these feelings as the gifts were presented.

In the afternoon the funeral was held in the church and afterwards the pastor's coffin was buried outside his house next to the church. Soon afterwards the visitors departed and the village returned to everyday life. All the credits were paid off and from the gifts that were left over each *matai* was given five fine mats (seven or eight for the older ones), \$10 each and five tins of fish. The members of the women's committee were also given \$10 each and five tins of fish. As the villagers reflected back on events that evening it was considered that it had been a "good funeral" because the village had not made a loss" (Maiava, 1988:1-3)

There are of course differences between *fa'alavelave*. At the conferment of a *matai* title it is the candidate who must supply the gifts. These will be stipulated in advance by the senior *matai* of the family, and will almost certainly include cattle. At a church dedication exchanges of gifts occur at each household in the congregation between extended family

members related to that household, with many such exchanges going on at the same time. Part of the purpose, in addition to opening the new church, is understood by all to be to assist the congregation to pay off the debt they will have incurred in building it. This is the one occasion where the exchange is not roughly equal, and is not expected to be.

Fa'alavelave have shown some changes over time. One of these has been the gifts that are given. In the past kegs of corned beef were popular but these have almost disappeared as people became dissatisfied with the fatty quality of the meat. Such kegs were locally produced and of a noticeably poorer quality in comparison to imported corned beef.

The other change has been the rise in the giving of cattle which will be discussed in Chapter 5. Giving pigs has also declined. This is related to the rise in the status of giving cattle relative to pigs, to the impact of the cyclones which caused a shortage of feed for pigs (and which may thus be only temporary), and to more dense housing which is leaving less room to raise pigs (Misa Telefoni, pers. comm., 1994).

The contributions from visitors from overseas, who may be members of either visitor or host groups, have also become more prominent. Some criticism from outsiders and urban Samoans has been made of the general increase in the value and volumes of gifts given. However, O'Meara (1990) has pointed out how *fa'alavelave* may be considered an adaptation to take fullest advantage of the high numbers of Samoans living overseas and in Apia. He has shrewdly observed that these visitors bring cash and take away locally produced items, predominately fine mats. In its crudest analysis it could be said such items were essentially sold. Samoans would never make such a direct connection. Nevertheless the 'success' or otherwise of a *fa'alavelave* is measured in the days afterward almost solely in financial terms.

Samoans have something of a love-hate relationship with *fa'alavelave*. They grumble and moan about them, and complain that they are too much trouble. However, at the very same time they will be planning for the next one with anticipation. It is important to give and to be seen to give because generosity enhances status. It is important that proper respect is shown.

Fa'alavelave have a very valuable purpose in relieving boredom. They add interest, variety, tension, diversion, and simply pleasure. They provide a day out, entertainment and leisure.

They are a pastime which combines the best elements of a competitive sport with good theatre, complete with drama and tension. It is very easy to be caught up in them, rather like living in a soap opera.

"Fa'alavelave ceremonies are important not only as foci for giving and receiving goods, however. Villagers also attend these ceremonies for socialising and for diversion. Ceremonies create an air of importance and excitement that interrupts the routine of daily life. In order to create a feeling of tension and excitement, villagers combine in a single public ceremony many of the things that matter most to them: family, food, money, competition in an open forum, a chance for men to display their knowledge and skill at oration, a chance to command and impress, a chance for women to take centre stage for a moment as they display their fine mats, a chance for young men and women to meet and talk amid the turmoil of their labour" (O'Meara, 1990:215)

Fa'alavelave have the excitement of activity, having the appearance of dignified chaos but actually being well structured and organised, not in any obvious way but by the familiarity that comes from having done this many times before and everyone knowing the procedure and their role in it. As a result of familiarity there is no nervousness due to the importance of the occasion, but rather a relaxed professionalism. As a 'sport' they allow one to be both a participant as well as a spectator (everyone has some role as participant), and encompass good-natured competition and conflict. The competitive nature of Samoans is satisfied as *fa'alavelave* allow the peaceful expression of status and authority in a spirit of friendly competition.

As well as the excitement and drama, O'Meara (1990) suggests several reasons for the endurance of *fa'alavelave*. First villagers are able to exchange their subsistence products such as fine mats, which have no other utility, for cash and purchased goods. Second, by engaging urban and overseas relatives, rural Samoans are able to make a profit from *fa'alavelave*.

"the ceremonial system is far less traditional than it appears on the surface ... [It] endures because Samoans have adapted it to their current needs, not because Samoans or their culture are inherently conservative" (O'Meara, 1990:214)

Third, as cash incomes increase, more people are able to gain status and prestige from public displays of gift giving. Anyone can have their moment of glory. Those who have moved away from the culture in other ways can instantly atone. Fourth, and possibly most importantly, they maintain the large extended family and the security it provides, functioning as family reunions and keeping family members in touch with each other.

"few Samoans are yet so wealthy that they can afford to withdraw from the mutual support and security system which is the ultimate foundation of the extended family ... Ceremonial exchanges provide frequent opportunity for people to demonstrate their own (and check other people's) ability and willingness to come to the support of their kin" (O'Meara, 1990:215)

And finally, as we have suggested earlier, the endurance of *fa'alavelave* may compensate for the loss of the co-operative productive and economic roles of the extended family, providing reassurance that the social and security roles still work and that *matai* still have important social and economic functions to perform. The role of cattle in *fa'alavelave* will be examined more closely in Chapter 5.

4.7 Conclusion

In this chapter the themes of commitment to family, social change, ambivalence and contradictions in Samoan culture have emerged. Samoan culture has shown many changes as a result of exposure to, interaction with and in response to Western ways, especially the cash economy. Many of these changes are exactly those changes both predicted and required by the modernisation model of development.

The size of families is becoming smaller, from extended to intermediate sized, in terms of both emotional focus and function as the productive unit. This is related to a move towards increasing individualism, and a decrease in the productive control and political power of

matai. Related to this are changes to the land tenure system. The effects of emigration have contributed, and now achievement, as well as ascription, contributes to status.

What we have also noted, however, is that these changes have come from within. They have frequently been justified using tradition and have been made in order to achieve traditional objectives. O'Meara (1987) used the term 'customary individualism' to suggest that individualism is now considered customary. Thus Samoan culture is flexible and adaptable, but only in accordance with Samoans' own criteria. As Oliver writes: "The Samoan way in the year 2000 will be the way Samoans will be doing things in the year 2000, not the way they do them now" (Oliver, 1983:118). However, those that follow the modernisation model have, ironically, failed to recognise that these changes have occurred and continue to blame Samoan culture for the 'stagnation' in agricultural development in Samoa.

A second theme has been the complexity and intense nature of the culture which produces both tension and ambivalence. Contradictions are found between co-operation and competition, between old and new ways, values and forms of security, and between generosity and the 'search for money'. Tension results from the contradiction between obligation, service and submission, and personal emotion and ambition. Ambivalence results in the holding of two opposing views or emotions at the same time, as a way of dealing with these contradictions.

The culture which creates these contradictions also provides processes for their peaceful resolution within ordered boundaries. *Fa'alavelave*, while being a cause of tension, provide one way. But they illustrate the contradictions. For example, while expressing love and generosity, *fa'alavelave* are considered most successful if they are profitable or at least do not make a loss. While appearing to be traditional they have taken advantage of modern emigration and cash. They still allow the peaceful expression of status and the resolution of tension in a outward spirit of friendly co-operation.

All of these things have an impact on cattle: in attitudes to cattle, uses made of cattle and behaviour towards cattle. But by examining how cattle are viewed and used we will also see that they reflect the nature of the changes that are occurring and their role in resolving some of the tensions in contemporary Samoan culture. What is it about cattle that has made them so appealing?

Are cattle better suited to the new individual ownership, intermediate families and the new system of land tenure? If so, the question arises as to whether cattle are just adopted as a consequence, or are part of the cause, of social change. Is it that they are able to fill a number of both old and new functions, and if so are they able to act as something of a bridge between the old and the new? If so, do they ease tensions or, at times cause new tensions leading to inter-generational conflict, internalised frustrations, jealousy and stealing? Are farmers motivated by old or new ambitions or both? Can cattle satisfy both the traditional importance of status and position, and the 'search for money' and modern material aspirations? The next three chapters, using the results of field research, will answer these questions.

This thesis argues that culture is not a major barrier to conventional development and, further, "so what if it is?" We have seen several examples where Samoan culture has motivated change, and where traditional principles have been used to justify change. These responses have been endogenously produced often where failure has been officially recorded, in terms of change towards conventional development objectives. The prime example is the changes to land tenure. Can these same principles be seen with regard to cattle?

But there is also the case where changes occur in order to consolidate and strengthen traditional culture. That is, new things are incorporated into traditional culture which strengthen it. The incorporation of cattle into *fa'alavelave* is such an example, and this is specifically quoted as an example of Samoans doing the 'wrong thing', and a reason for development project failure. The alternative argument is that *fa'alavelave* provide additional motivation and the incorporation of cattle into *fa'alavelave*, simply by being an indigenous response to a new technology, whereby that technology is adapted to Samoans' own needs, is in fact a measure of success rather than failure. The hypothesis here is that, rather than being a constraint, Samoan culture can provide a motivation for the adoption of new technologies and this has occurred in the case of cattle. Furthermore, if cattle have been integrated into Samoan culture by Samoans according to their own cultural precedents to further their own objectives, then it can be argued that the objections raised by development practitioners are a non-issue.

¹ In Chapter 2 we saw the social impact of emigration on those remaining via the impact of remittances. The direct impact of emigration on cattle farming will be explored further in Chapter 6.

² The importance of family over distance, I believe, helps explain Samoa's high literacy rate because members who are separated write letters to each other frequently.

³ Such emotional ambivalence is also related to the Samoan view of God who is portrayed as both a loving and a stern punishing God. Churches are given to in much the same way as parents.

⁴ While generosity to one's close family is not necessarily reciprocated, generosity to the extended family and community, which is a source of status, is reciprocated because giving creates obligation. Remittances from overseas are not reciprocated.

⁵ With the possible exception of storing fine mats which, if kept dry, do not decay.

Chapter Five

Cattle in Samoan Culture: *Fa'alavelave*

5.1 Introduction

Chapters 5, 6 and 7 are a unit of work and comprise the analysis of the fieldwork of this thesis in which what was previously assumed or unquestioned is tested. In Chapter 3 the way in which Samoan culture and *fa'alavelave* in particular have frequently received criticism in relation to cattle projects was outlined. *Fa'alavelave* form a case study and a test of the generally accepted wisdom and assumptions derived from modernisation theory (that traditional cultures and cultural practices, customs and rituals are a constraint to development) and of the views widely held by project planners and consultants about traditional cultures.

However, a proper understanding of the role of *fa'alavelave* requires a more thorough analysis than they have previously received. This chapter and Chapter 6 examine the role and impact of cattle in Samoan culture, and the role and impact of Samoan culture in smallholder cattle farming. The purpose of this chapter is to assess *fa'alavelave* specifically, empirically analyse their impact on cattle herds and to conclude whether they are a constraint or a motivation to smallholder cattle farming. In doing this the aim is to represent the Samoan perspective. How are cattle perceived culturally? What do they represent and what do Samoans try to achieve culturally with cattle?

The chapter begins this discussion with a description of a funeral observed and recorded in 1994. Then the results of a survey of 58 *fa'alavelave* recorded in 1987 are compared with 60 *fa'alavelave* recorded in 1994. The changes recorded between two points in time, just seven years apart, are startling as farmers journeyed through a learning process and as Samoan culture and society continued to change.

In the second part of this chapter farmers' views about contributing cattle to *fa'alavelave* are discussed. These include their views about the usefulness as well as the importance and prestige of cattle, their views about *fa'alavelave* and their own and other people's behaviour, the pleasures and the pressures, their purposes and strategies. Issues of motivation, obligation, ambivalence and changing attitudes are also examined.

5.2 A Case Study of a Funeral

In mid-May 1994, while this research was being conducted, my husband's uncle, Matai'a Tavale I, died suddenly. I was able to follow and record the funeral and all associated activities very closely, focusing on the host group and one visitor group. This *fa'alavelave* is photo-documented in Plates 11-42. The host group comprised Matai'a's own household and those coming under his Matai'a title (e.g. his children). The visitor group comprised the household and title into which his sister Taua had married, the Maiava title. Now 76, she had married Maiava Gaugatao Papali'i and they lived in Sato'alepai only a few houses away from her brother. Maiava had died in 1987.

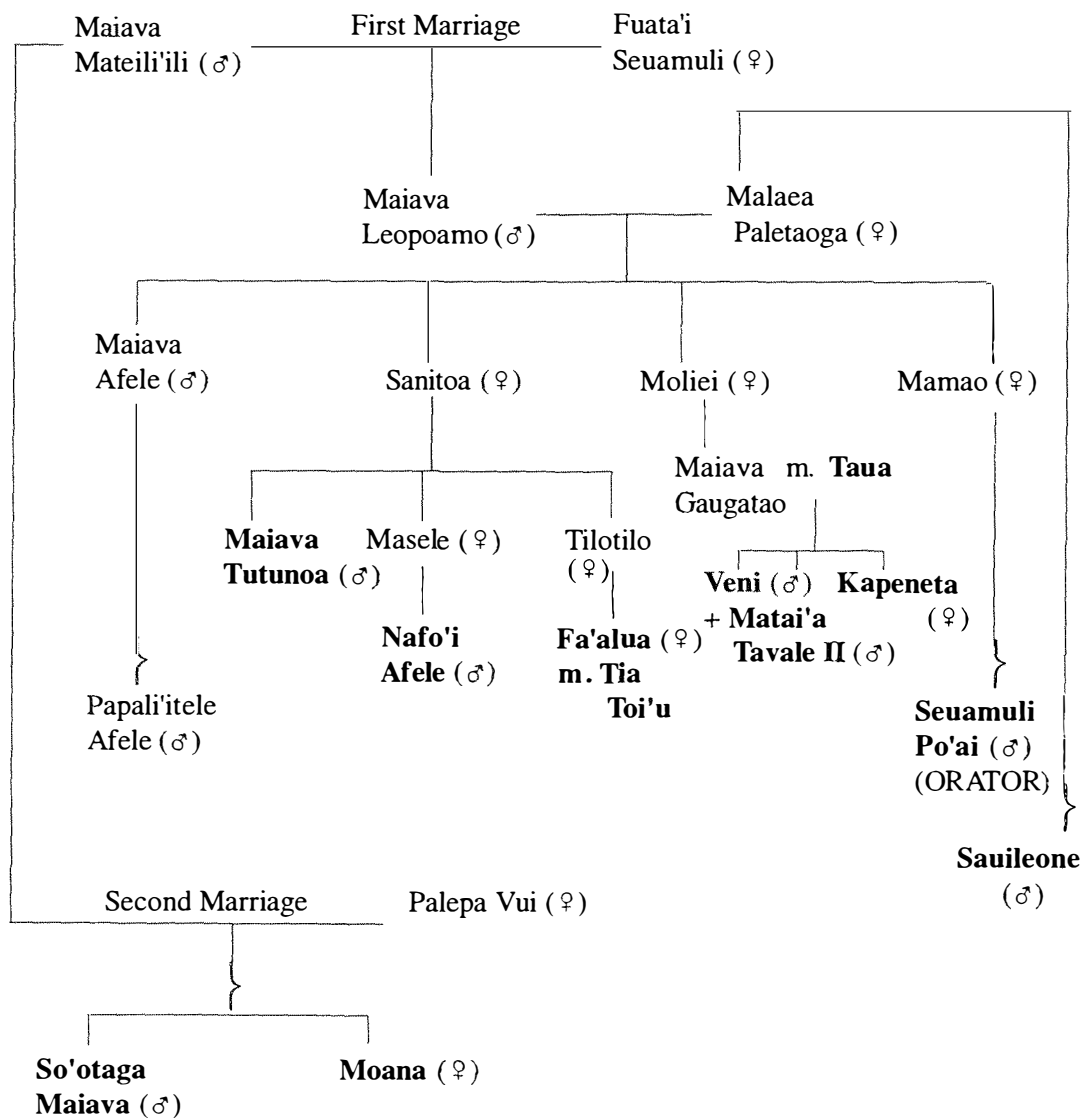
Even though she was Matai'a's only remaining sister and lived just two houses away from him, she, by virtue of marriage, was within the Maiava title and came as a visitor to her own brother's funeral. (This does not mean that in reality they did not maintain a close relationship. In fact, Taua joined the mourners beside the casket while her children represented the Maiava title/family in the exchange proceedings outside.)

The relationship between the two families was further strengthened by Taua's son being given the title Matai'a when it had been split and redistributed some years previously, in other words bringing the Matai'a title into the Maiava family.

Taua had seven children and two adopted children. All were now adults and only one son, Veni, remained in Sato'alepai and he, although as yet untitled in 1994, had taken on increasing responsibilities as head of the household. (In 1996 Veni was conferred his late father's Maiava title). Other children were in Australia (1), New Zealand (2), Apia (2), other villages in Upolu (1) and in Saleaula, Savai'i, close by (1, Kapeneta). An unmarried daughter, Fa'au'uga, also remained in the household.

Among the Maiava extended family preparations began. On the day before the funeral in each contributing household fine mats and cash were taken out of storage, counted and inspected. In the evening the relatives of the Maiava family (the family of Taua's husband and children) gathered in Maiava Tutunoa's house to combine all the contributions of their member households. Maiava Tutunoa was considered the head of the Maiava extended family. During the evening others arrived from other connected households such as those whose children or siblings had married into the Maiava family (the families of Taua's sons- and daughters-in law), and other extended family members, some quite distant. The relationships among the contributors is shown in Figure 5.1.

Figure 5.1: Relationships Among Contributors of Fine Mats and Money to the Maiava Family Contribution to the Funeral of Matai'a Tavale I



The contributions were not directly required or predetermined in amount, but were given spontaneously (in that the rules governing contributions were internalised, not spoken). Households which were able to give more did so and those who were not gave what they were able. Contributions within each household came not just from the blood relatives but also from the families of spouses, and some more distant relatives. In total nine households gave to the Maiava contribution. This was recorded by Matai'a Tavale II for this thesis:

1. Veni's household (including Taua and Fa'au'uga): 12 ordinary fine mats and 1 large fine mat, 3 cartons of tinned fish and \$200. The money was contributed by Veni's brother, Matai'a Tavale II, who was visiting from New Zealand. Taua had kept the large fine mat especially for her brother. The family of Veni's wife, Savalia, contributed as well.
2. Kapeneta's household: 20 ordinary fine mats, 1 large fine mat and 3 cartons of tinned fish. Her husband's family contributed to this.
3. Maiava Tutunoa: 9 ordinary fine mats, 1 large fine mat, 1 carton of tinned fish and \$90.
4. Nafō'i Afele: 15 ordinary fine mats, 1 large fine mat and \$140.
5. Tia Toi'u: 10 fine mats, 1 carton of tinned fish and \$40.
6. Seuamuli Po'ai (Orator for the family): 30 ordinary fine mats, 1 large fine mat and \$50.
7. Sauileone: 10 ordinary fine mats, 1 large fine mat and \$60.
8. So'otaga: 5 fine mats and \$40.
9. Moana: 7 fine mats and \$20.

Seuamuli made a small personal contribution here because he was the orator. However, he also made his own larger contribution on the *malae* on behalf of his own and his wife's extended family (which is shown in the record of exchange). To contribute to two visitor groups is not uncommon. Other Maiava relatives also formed visitor groups (e.g. Papali'itele Afele, see Figure 5.1).

The contributions from these nine households combined to make a total of 118 fine mats, 6 large fine mats, 8 cartons of tinned fish and \$640. However the meeting decided by consensus that a contribution of 100 fine mats, 4 large fine mats, 8 cartons of tinned fish and \$600 was appropriate and the additional 18 fine mats and \$40 were redistributed equally among those present. The additional 2 large fine mats were given to Maiava Tutunoa.

In exchange for their gift they would later receive 1 whole cattle beast, \$200, 2 cartons of tinned fish, 50 fine mats and 2 cartons of cabin biscuits.

No cattle were given by the Maiava family. Veni, Taua's son with whom she lived, had no cattle, but this household would certainly have contributed cattle if they had been able because of their closeness to Matai'a Tavale I, even though they were part of a visitor group. Cattle are generally only given by hosts in exchange for gifts from visitors but sometimes are given by visitors if they are closely related (as Veni would have done) or are close friends, provided that transport is not a barrier.

However Iosefa, who lived with them, had cattle. Iosefa, aged about 22, was Matai'a's grandson. He did not live in his father's household but for several years, at the wishes of his family, had lived and served in the household of his great-aunt, Matai'a's sister, Taua, and was considered a family member there under normal circumstances.

Iosefa had a cow which he had received from the YMCA. It had had a calf some time ago and he was rather pleased to own these two cattle. However, Iosefa was not counted as part of this family for the purposes of this funeral but was counted as his father's son. Thus he was not required to give to the Maiava contribution although perhaps in a more status conscious household with a more senior *matai* he may have been.

Iosefa's father, Pili (Matai'a's son) also had cattle which without any hesitation would be used for his father's funeral as part of the host contribution. However, Pili could not find his cattle. They were deep in the plantation and he had to search for several days to find them. (Sometimes this is used as an excuse to avoid giving but in this case was genuine.) During this time it was clearly understood that if these cattle could not be found in time for the funeral then Pili would have to ask Iosefa to kill his cow and Iosefa would have no option but to agree. Everyone understood that this was the only option but were very sympathetic to

Iosefa's plight and hoped that the other cattle would be found. Iosefa meanwhile, took to being as invisible as he could, moving in the shadows around the house, as if by not drawing attention to himself, his cow would be forgotten about as well. Fortunately Pili did find his cattle in time and Iosefa's cow was saved.

In the early evening the day before the funeral I accompanied another cattle owner, Malologa, Matai'a's nephew (see Figure 5.2) and about six *taulele'a* (untitled men) into the plantation to observe the finding, killing, butchering and preparation of a cattle beast that was part of the Matai'a family contribution. That is it would be given in exchange for the gifts brought by visitors. This is shown in Plates 15-26.

It took about an hour to locate the bull that had been selected for slaughter. It was killed using a rifle; patience was required to get a good shot between the eyes from a distance of about twenty metres. Once dead, the bull was turned onto its back and the legs pulled tightly apart to make butchering easier, one *taule'ale'a* holding each limb. Using knives, the skin was slit the length of the body and down the inner legs, and pulled back, forming a surface like a sheet that kept the meat off the ground. The internal cavity was slit open from throat to tail and useful organs such as the liver and heart were put into a plastic bucket for later use. The fore limbs and then the hind limbs were removed and placed on a bed of leaves and branches to keep them off the ground. The ribs were removed and the gut left to be eaten by dogs or pigs. (No trace of it remained the next day). Poles were used to carry the meat to the back of a pick-up truck where again leaves were used to keep the meat (and the pick-up) clean. The meat was taken back to the village, placed on a raised platform and covered overnight, ready for the next day.

The work of slaughtering and butchering is carried out by young untitled men (*taulele'a*). I recorded this all on video and later in the evening played the tape back to them. The young men were intrigued that I should be interested in what they did as their work is not usually considered particularly important in comparison to the 'important' tasks carried out by *matai*.

Early the next morning I observed the same butchering procedure with a cow (about six years old) which had been selected because it had not had any calves. While it was being cut up however, there was a horrified gasp among the workers. Suddenly it was thought that she was carrying a calf as there was a large sac in her internal cavity. This was inspected very closely and it was decided with relief that this was not a calf after all. It was a growth which

may have been a cause of her infertility, I did not know. But what I did observe was the concern and disappointment expressed when it was thought that they had inadvertently slaughtered a cow that was in calf.

The day of the funeral is photo-documented in Plates 27-42. Throughout the day many visitor groups arrived on the *malae*. After waiting some time it was the turn of the Maiava family to speak and present their gifts. The Maiava orator, Seuamuli Po'ai, began by saying that they were coming on behalf of Taua and the Maiava family. He stressed the connection between the two families: how Taua had come into the Maiava family, and how the Matai'a title had been conferred on her son. He recognised Matai'a Tavale I's title. He expressed their sympathy and heartfelt grief at the loss of Taua's brother. He explained that the first large fine mat was a gift of farewell from Taua to her brother. The next represented the *matai* of the Maiava family and were a gift of thanks and acknowledgement for conferring the Matai'a title to the Maiava family, and recognition of that title. Another large mat represented all the rest of the small mats. After all the small fine mats, money and cartons of tinned fish were given, a number a large mats at the end were given as gifts to individual *matai*.

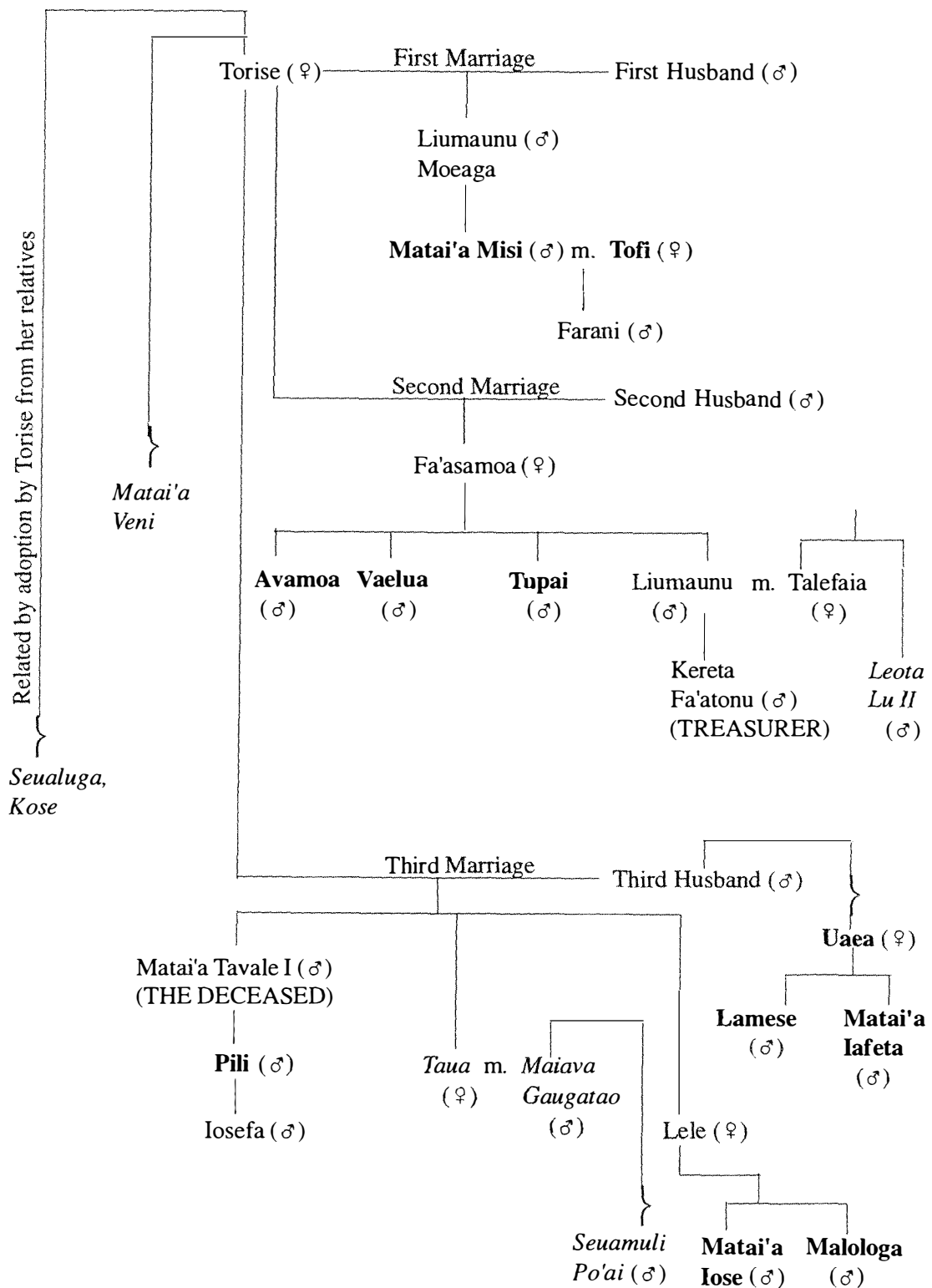
The orator of the Matai'a family replied, thanking them for coming, for their sympathy and gifts. In acknowledging all that had been said he expressed the hope that the Matai'a title had made a contribution to the Maiava family and that Taua had been a contribution too (i.e. had been of benefit to the family). He said the Maiava family had shown their love by coming and shown, as he could clearly see, that they loved Taua and that she had been well received and taken care of by the Maiavas. He thanked them for acknowledging her contribution to the family and for acknowledging and respecting the Matai'a title by their care for Taua. He then detailed what would be given in return.

Matai'a had been a member of the village council (*fono*). In recognition of his contribution to village affairs and his role in the village as a leader the members of the *fono* presented an '*ava* or welcome to the mourners and visiting relatives. That is, in a line, they one by one placed an '*ava* root (about two metres long and appearing as a stick) in front of the *fale* where the casket lay. Again their relationship to Matai'a in the village council was emphasised.

Exchanges continued throughout the day. In the afternoon the casket was taken to the church for a funeral service and then buried. During this time exchanges continued on the *malae*.

All exchanges were recorded by the treasurer, Matai'a's grand nephew, Kereta Fa'atonu who was a pastor. These records are used below. Only those exchanges that involved cattle have been isolated. The relationship among these contributors is shown in Figure 5.2.

Figure 5.2: Relationships Among Contributors (and Some Receivers) of Cattle by the Matai'a Family to the Funeral of Matai'a Tavale I



In Figure 5.2 those members of the Matai'a family who contributed cattle are in bold while those who received cattle are in italics. It can be seen that in most cases the contributors are more closely related to the deceased as descendants of his mother (immediate family) while those who received beef are more distantly related (extended family) either by marriage or as descendants of his grandparents or by distant adoption. The Maiavas are the exception because they are so close, but again it is because of a marriage.

**Record of Cattle Exchanged at the Funeral of Matai'a Tavale I
on Friday 20th and Saturday 21st May 1994.**

A. Contribution of cattle by Matai'a Family Members

1. Avamoa, Vaelua, Tupai and others (Relatives from Papa Sataua)	1 beast
2. Uaea and Lamese (Relatives from Safune)	1 beast
3. Matai'a Misi and Tofi (Relatives from Apia) (animal was raised in Sato'alepai by their son Farani)	1 beast
4. Matai'a Iose and Malologa (Relatives residing in Sato'alepai)	2 beasts
5. Pili (son of the late Matai'a)	1 beast
Total: 6 cattle	

An additional cattle beast was contributed by a visitor group, either a relative or friend, making a total of seven cattle.

B. Distribution of these seven cattle at *fa'alavelave*

1. Seualuga, Kose and family (Relatives from Safotu): 1 whole beast in exchange for 50 fine mats, \$500 and 2 cartons of tinned fish

2. Leota Lu II and family (Relatives from Avao): 1 whole beast in exchange for 107 fine mats and \$300
3. Seuamuli Po'ai and family (Relatives from Fagamalo): 1 whole beast in exchange for 104 fine mats and \$500

For these three groups nothing else was given back, a whole animal was sufficient. However, fine mats are worth about \$10 each, and a cattle beast between \$700-\$1,000 (depending on size) to a commercial butcher, so the exchange favoured the hosts, as is usual.

4. The Maiava Family (Sato'alepai): 1 whole beast, \$200, 2 cartons of tinned fish, 50 fine mats and 2 cartons of cabin biscuits (in exchange for 100 fine mats, 4 large fine mats, 8 cartons of tinned fish and \$600)
5. Council of Chiefs of Sato'alepai (who had presented the 'ava): 1 whole beast given freely

The other two beasts were distributed as follows:

6. Seualuga (Relative from Papa): 1 whole leg and two cartons of tinned fish in exchange for 36 fine mats and \$100
7. Tuiavi'i (Relative from Safune): 1 whole leg, 2 cartons of tinned fish, 1 keg of corned beef and \$100 in exchange for 78 fine mats and \$200
8. Sei Vaelua (Relatives from Sapapali'i): 1 whole leg and 1 carton of tinned fish in exchange for 18 fine mats and \$100
9. Papali'itele Afele (Relatives from Sapapali'i): 1 whole leg and 2 cartons of tinned fish in exchange for 42 fine mats and \$100
10. Matai'a Veni and Sera (*Matai* of the family): 1 whole leg in exchange for \$500 and 16 fine mats
11. Uaea, Lamese and Matai'a Iafeta (*Matai* of the family): 1 whole leg in exchange for 1 whole animal and 22 fine mats (note: given back within own family)
12. For food preparation: 2 whole legs and necks (*ivi muliulu*) of these two animals



Plate 11. Taua (far right), her household and visitors. Veni is in the centre (holding baby).



Plate 12. Host family preparations: cartons of tinned fish are stacked up.



Plate 13. The host family records all in-family contributions and decisions made regarding tomorrow's exchange.



Plate 14. Here visitor family preparations occur in the evening as households combine their contributions of fine mats and money (and sometimes other goods).



Plate 15. This barren cow has been selected for slaughter.



Plate 16.
Malologa, a
member of the
host family,
prepares to shoot
one of his cattle.



Plate 17. Slaughtering and butchering is the job of the untitled men (*taulele'a*).



Plate 18. The chosen cattle beast is shot in the forehead. Patience is required to get a good shot.



Plate 19. With the dead beast on its back, the four limbs are held apart and the skin removed.



Plate 20.
The internal cavity is cut open from the throat to the abdomen. Useful organs (heart and liver) are put into a plastic bucket.



Plate 21. The fore limbs are removed.



Plate 22. The hind limbs are removed.



Plate 23. A bed of leaves and branches keeps the meat off the ground. Poles are used to carry the legs of beef out of the bush.



Plate 24. The ribs are removed and carried away. The gut is discarded.



Plate 25. Transport to the village is on the back of a pick-up, again on a bed of leaves.



Plate 26. The beef is piled up ready for the exchange.



Plate 27. Beef is diced for making chop suey to feed the visitors.



Plate 28. The big pot on the left is chop suey and contains beef. Sausages and chicken portions are also shown.



Plate 29. Polystyrene containers have replaced containers woven from coconut fronds (*ma'ilo*).



Plate 30. Everything is ready. *Taulele'a* are ready to fetch and carry as instructed.



Plate 31. Mourners and representatives of the Women's Committee keep vigil with the coffin.



Plate 32. The visitors (right) present fine mats (*ie toga*) and money to the hosts (left). Note the position of the two orators.



Plate 33. In return, the visitors are given fine mats.



Plate 34. On the far side portions of beef are being given. (Note the pile of beef on the ground).



Plate 35. The woman in the centre is carrying money to the visitor group.



Plate 36. The *matai* of the village council present 'ava roots outside the *fale* where the casket rests because the deceased was a senior *matai*.



Plate 37. The funeral service. Meanwhile exchanges continue on the *malae*.



Plate 38. The casket is carried to the grave.



Plate 39. A quality fine mat is so fine that light passes through it.



Plate 40. The treasurer records the details of each exchange and counts the money.



Plates 41 and 42. Returning home with bundles of fine mats.

In addition the ribs and 'back sides' (rumps) of these two animals were given to the women who had helped doing the cooking throughout the two days. The leftovers were used by the host family and cooked for their *to'ona'i* (Sunday mid-day dinner).

One of the heads was discarded as it was no longer useable and the other was cooked in the *umu* (oven) and eaten by the youths (*taulele'a*) who had made the oven to cook the food. The liver, hearts, kidneys and fat of all the beasts that were killed were variously distributed among the cattle owners and helpers (whoever was there at the time) "for the children". Anything else was discarded and eaten by dogs or pigs.

The Maiava family held another meeting that evening in Maiava Tutunoa's house and distributed what they had received back to their contributors in proportion to what they had contributed, except that no cash was given to those from overseas. A joke was made that they wouldn't mind because they had plenty anyway. In the Matai'a household one female relative from America ended up paying a \$600 bill for bread. The beef was distributed by those who had received it back through their contributing households and most was diced and cooked as *supo*, a Chinese style soup with noodles and vegetables.

5.3 A Survey of *Fa'alavelave*

In 1987 a sample of 58 *fa'alavelave* to which cattle had been contributed was collected from 59 respondents by collecting the data about their two most recent *fa'alavelave* to which cattle had been contributed. In 1994 a similar sample of 60 *fa'alavelave* to which cattle had been contributed was collected from 43 respondents. The respondents in 1994 were the same people as in the 1987 survey. Of the respondents some had never given cattle to *fa'alavelave*, some had given only once that they could remember (or since 1987 in 1994) and some had given two or more times. Table 5.1 shows the increase in their contribution of cattle in those seven years.

Table 5.1: Proportion of Respondents Who Contributed Cattle to *Fa'alavelave*

Respondents	1987		1994	
	Number	%	Number	%
Never gave	25	42.4	6	14.0
Gave once	12	20.3	13	30.2
Gave twice or more	22	37.3	24	55.8
Totals	59	100.0	43	100.0

Source: Fieldwork, 1987, 1994.

Immediately we can see that the contributing of cattle to *fa'alavelave* has increased among cattle farmers with the percentage claiming to have never given falling from 42% to 14% in seven years. Thus the sample of 58 *fa'alavelave* in 1987 came from 58% of a larger sample of farmers while the sample of 60 *fa'alavelave* in 1994 came from 86% of a smaller sample of farmers.

The frequency of *fa'alavelave* to which cattle were contributed had also increased significantly as shown in Table 5.2.

Table 5.2: Frequency of Contribution of Cattle to *Fa'alavelave*

Months since most recent <i>fa'alavelave</i>	1987	1994
Average	26.2	12.9
Range	1-108	0-51
Median	12.5	8.0
Months between two most recent <i>fa'alavelave</i>		
Average	26.6	11.7
Range	2-104	1-34
Median	18.5	9.5

Source: Fieldwork, 1987, 1994.

These figures suggest that the contribution of cattle to *fa'alavelave* has doubled in frequency in seven years, from about once every 26 months to once every 13 months for each farmer on average. The number of *fa'alavelave* may have increased but certainly not doubled in that time, so the number of *fa'alavelave* at which cattle are contributed must have increased significantly.

Averages are slightly misleading here as in most of the data on *fa'alavelave*. Throughout this analysis there are cases of extreme contributions which skew the averages and obscure the more typical situation. Thus medians have been included throughout to indicate the more typical situation and because, when contrasted with averages, they indicate the direction and amount of skew. In Table 5.2 it is those farmers who contribute very rarely who skew the data. Thus the median time between contributions of cattle has dropped from 18.5 months to 9.5 months which nevertheless again suggests that the frequency of contributions of cattle has doubled. Many farmers contribute much more frequently: in 1994, nine out of 37 *fa'alavelave* (or 24% of *fa'alavelave*) to which cattle had been contributed had occurred one month or less than one month previously.

These data would initially suggest that *fa'alavelave* must be having a devastating effect on progress in the smallholder cattle sector. Data on the numbers of cattle being contributed would seem to support this view as shown in Table 5.3. While the median remained at one, meaning that 50% or more of contributions comprised only one cattle beast, and the averages are skewed towards less frequent but larger contributions, the average contributions, which indicate total impact on cattle numbers, rose from just over two to three beasts per *fa'alavelave* in seven years. Together with the increasing frequency of contributions of cattle to *fa'alavelave* and a much greater proportion of cattle farmers contributing cattle to *fa'alavelave*, disaster would seem to be imminent.

Table 5.3: Numbers of Cattle Contributed to *Fa'avelave I*

	1987	1994
Number of <i>fa'avelave</i>	58	60
Total number of cattle contributed	130	179
Average number of cattle	2.24	2.98
Range	1-14	1-17
Median	1	1

Source: Fieldwork, 1987, 1994.

Table 5.4 shows the skew effect

Table 5.4: Numbers of Cattle Contributed to *Fa'avelave II*

Number of cattle contributed per <i>fa'avelave</i>	Percentage of <i>fa'avelave</i>	
	1987	1994
1	58.7	56.7
2	15.5	15.0
3	6.9	5.0
4	5.2	1.7
5	6.9	3.3
6	1.7	5.0
7	3.4	1.7
8	0	3.3
9	0	0
10	0	3.3
11-17	1.7	5.0
Totals	100.0	100.0

Source: Fieldwork, 1987, 1994.

The patterns in 1987 and 1994 are very similar with about 57-59% of contributions being one beast and 15-16% being two cattle. Thus in nearly three-quarters of *fa'alavelave* what would seem to be a manageable contribution, from a farming perspective, depending on herd size and frequency of *fa'alavelave*, is made. This did not change between 1987 and 1994. Three points can be made from Table 5.4. First, anecdotal stories of large contributions are not representative of the average farmer and second, typical contributions are, perhaps, quite reasonable. Third, however, there does appear to be a tendency for large contributions to be becoming more generous. These have moved from being in the range of 3-5 and up to 7 with one extreme example of 14 in 1987, to 5-8 with several cases from 10 to 17 by 1994.

In view of these larger contributions and the skewing effect they have, further analysis is required. I begin by assuming that they are due to differences between *fa'alavelave* rather than differences between farmers, although throughout this research I was aware of the great variety of attitudes and behaviours amongst the respondents. Certainly different respondents might contribute differently to the same *fa'alavelave* and this will be discussed further in Section 5.4.

It is much easier to classify *fa'alavelave* than it is to classify farmers, and the data immediately suggest that funerals, and especially funerals of immediate family members, received the greatest contributions of cattle. In particular are the funerals of parents and one's spouse's parents, and also parents' siblings, one's own siblings and one's adult children. The death of the owner of the herd, as occurred in several cases between 1987 and 1994 is also included here. Table 5.5 shows the different types of *fa'alavelave* to which cattle were contributed. (One must remember that as there are *fa'alavelave* to which cattle are not contributed, the data do not indicate the frequencies of all *fa'alavelave*. This is because cattle may be contributed to one type of *fa'alavelave* more frequently than to another type. These data do not record this specifically but indicate indirectly that cattle are contributed to funerals more frequently than to other *fa'alavelave*).

Table 5.5 indicates to some extent the natural variation in the frequency of events. Deaths in particular, and therefore funerals, are random events, the timing or frequency of which cannot be influenced by people. In addition the size of the sub-samples of *fa'alavelave*, especially the smaller ones, is too small to draw any statistically significant conclusions. The data cannot be used to conclude, for example, that Samoans have stopped building

churches or that the number of weddings to which cattle are contributed has halved while the number of title conferments has doubled in seven years.

Table 5.5: The Different Types of *Fa'alavelave* to which Cattle were Contributed

	1987		1994	
	Number	%	Number	%
Funeral of immediate family member	21	36.2	26	43.3
Funeral of extended family member	8	13.8	4	6.7
Funeral of friend/ village <i>matai</i> /pastor	4	6.9	2	3.3
Conferment of title	5	8.6	10	16.7
Wedding	10	17.2	5	8.3
<i>Sua</i> (Traditional welcome)	0	0	5	8.3
Overseas <i>matai</i> visit	2	3.5	2	3.3
Church dedication	3	5.2	0	0
Church donation	1	1.7	2	3.3
Welcome new pastor	1	1.7	0	0
Fine	1	1.7	0	0
Other	2	3.5	4	6.8
Totals	58	100.0	60	100.0

Source: Fieldwork, 1987, 1994.

Fines of cattle are undoubtedly under-represented in Table 5.5 because it is very embarrassing for a respondent to admit this. The one respondent who did admit this in 1987 refused to tell me the nature of their 'crime'. For cattle to be involved it could have been quite serious such as refusing to obey the village council of *matai*, being drunk and disorderly in the village or even adultery. But I gained data on the use of cattle in the payment of fines when I asked about the receiving of beef dispersed after *fa'alavelave*. These data are in Table 5.6 and show that 9.5% of receipts of beef were from fines. The data in Table 5.6 echo and support the data in Table 5.5. Of 45 respondents, 42, or 93%, had received beef from a *fa'alavelave* within the last year. Some 60% of these *fa'alavelave* were funerals. In at least two cases, respondents had received beef back from the same funeral to which they had contributed cattle.

Table 5.6: Type of *Fa'alavelave* from which Beef Most Recently Received (1994)

	Number	%
Funeral	25	59.5
Conferment of title	5	11.9
Wedding	2	4.8
<i>Sua</i> (Traditional welcome)	0	0
Overseas <i>matai</i> visit	0	0
Church dedication	0	0
Welcome new pastor/gift from pastor /taking pastor to new village	3	7.1
Fine	4	9.5
Injured or escaped animal killed and distributed to neighbours	1	2.4
Other	2	4.8
Totals	42	100.0

Source: Fieldwork, 1994.

With reference back to Table 5.5. we can conclude that it is immediate family funerals which are the most frequent recipients of cattle and the data suggest that we can hypothesise that this is increasing. Of great interest is the relatively small number of extended family funerals to which cattle are contributed, despite our being able to assume that they occur with probably a greater frequency than immediate family funerals (that is, extended families are larger and so extended family members probably die more often than immediate family members). While contributions of cattle to immediate family funerals appears to be increasing, contributions of cattle to extended family funerals appears to be decreasing. One factor could be the greater chance of attending the funeral of an extended family member as a visitor group as explained in Chapter 4. In *fa'alavelave* it is generally only the host group (the wider immediate family) which contributes cattle while the visiting groups (extended family) contribute cash and fine mats. However, even while taking this into account, the figures for cattle being contributed to extended family funerals still seem small.

But the data regarding cattle are supported by the data collected regarding pigs contributed to these same *fa'alavelave* in 1994. Of the 49% of respondents who contributed pigs as well

as cattle to these *fa'alavelave*, 73% gave pigs for immediate family funerals and 32% for other *fa'alavelave* but no pigs were contributed in addition to cattle for extended family funerals. (It is worth noting however, that 51% of respondents did not contribute any pigs in addition to cattle. For many *fa'alavelave* cattle are sufficient and pigs are no longer necessary, unless you chose to give pigs instead of cattle).

The best explanation is the steady trend towards nuclearisation of families in Samoa: the weakening of the extended family, while the bonds within the immediate family and especially those with parents remain strong or are even strengthening as we saw in Chapter 4. The contribution of cattle can be seen as a reflection of the bonds and links in Samoan society and the changes that are occurring within it.

Thus far we have determined that funerals are the most frequent destination for cattle contributed to *fa'alavelave*. But do they also account for the largest contributions in terms of the number of cattle contributed to each *fa'alavelave*; the skew factor in Table 5.4? One would hypothesise that larger numbers of cattle are contributed to immediate family funerals than to other *fa'alavelave*. Table 5.7 shows the range of contributions of cattle to immediate family funerals and to all other *fa'alavelave* in 1987 (to which cattle were contributed). Table 5.8 shows the same data for 1994. Table 5.9 summarises these data.

In almost all categories in Table 5.9 the median is below the average indicating that relative extravagance is not restricted to (but is more obvious at) funerals. What is such extravagance related to? Herd size? Social status? Age? Education? Or a random desire by some people to seek a moment of glory? As most respondents are *matai* it cannot be related to status by these data. Data on the percentage of herd given suggests no correlation with herd size. It is not correlated with age or education. Instead I suggest it is an unquantifiable factor of personal ambition, or personal sense of loss or obligation in the case of funerals. Isolating the largest contributions that skewed the figures shows extravagance is more closely related to the type of *fa'alavelave*. Almost all of the largest contributions were to parents' funerals. The few exceptions were conferments of *matai* titles of relatively high status to a close immediate family member.

Table 5.7: Numbers of Cattle Contributed to Immediate Family Funerals (I.F.Funerals) and Other *Fa'avelave* (1987) n=58

Number of Cattle	No. of I.F. Funerals	% of I.F. Funerals	No. of Other <i>Fa'avelave</i>	% of Other <i>Fa'avelave</i>
1	8	8.1%	26	70.3%
2	3	4.3%	6	16.2%
3	0	0	4	10.8%
4	3	4.3%	0	0
5	4	19.0%	0	0
6	0	0	1	2.7%
7	2	9.5%	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
>10	1	4.8%	0	0
Totals	21	100.0%	37	100.0%

Source: Fieldwork, 1987.

Table 5.8: Numbers of Cattle Contributed to Immediate Family Funerals (I.F.Funerals) and Other *Fa'avelave* (1994) n=60

Number of Cattle	No. of I.F. Funerals	% of I.F. Funerals	No. of Other <i>Fa'avelave</i>	% of Other <i>Fa'avelave</i>
1	8	31.0%	26	76.6%
2	3	11.5%	6	17.6%
3	3	11.5%	0	0
4	1	3.8%	0	0
5	1	3.8%	1	2.9%
6	3	11.5%	0	0
7	1	3.8%	0	0
8	2	7.7%	0	0
9	0	0	0	0
10	2	7.7%	0	0
>10	2	7.7%	1	2.9%
Totals	26	100.0%	34	100.0%

Source: Fieldwork, 1994

Table 5.9: Summary of Contributions of Cattle to *Fa'alavelave*

1987	Number	Number	Average		
A Funerals	Occasions	Cattle	Number	Range	Median
			Cattle		
Immediate Family					
Funerals	21	74	3.52	1-14	2
Extended Family & Other Funerals	12	17	1.42	1-3	1
Totals	33	91	2.76	1-14	2
B Non-Funerals					
Weddings	10	16	1.60	1-3	1
Title Conferments	5	5	1.00	1-1	1
Other <i>Fa'alavelave</i>	10	18	1.80	1-6	1
Totals	25	39	1.56	1-6	1
C All <i>Fa'alavelave</i>					
Immediate Family					
Funerals only	21	74	3.52	1-14	2
All Other <i>Fa'alavelave</i>	37	56	1.51	1-6	1
Totals	58	130	2.24	1-14	1

1994	Number	Number	Average		
A Funerals	Occasions	Cattle	Number	Range	Median
			Cattle		
Immediate Family					
Funerals	26	121	4.65	1-17	3
Extended Family & Other Funerals	6	7	1.17	1-2	1
Totals	32	128	4.00	1-17	2
B Non-Funerals					
Weddings	5	10	2.00	1-5	1
Title Conferments	10	26	2.60	1-15	1
Other <i>Fa'alavelave</i>	13	15	1.15	1-2	1
Totals	28	51	1.82	1-15	1
C All <i>Fa'alavelave</i>					
Immediate Family					
Funerals only	26	121	4.65	1-17	3
All Other <i>Fa'alavelave</i>	34	58	1.71	1-15	1
Totals	60	179	2.98	1-17	1

Source: Fieldwork, 1987, 1994.

Funerals of immediate family members, especially parents, consistently receive larger contributions. Perhaps surprisingly, contributions to funerals of extended family members, friends or unrelated village *matai* are on a par with or even below other *fa'alavelave*. The contribution to other funerals is the only figure to decrease from 1987 to 1994, from an average of 1.42 to 1.12 cattle per funeral. Thus in Tables 5.7 and 5.8 and section C of Table 5.9 immediate family funerals are separated from all other *fa'alavelave*, including other funerals. The data for weddings and title conferments also increase, although it must be remembered that these samples are too small to be anything other than indicative. However, the increase in contributions to title conferments from an average of 1.00 beast to 2.50 beasts per conferment (per contributor) reinforces the high status of cattle in a ceremony which has status at its heart.

In most categories the contributions for 1994 are significantly higher than the figures for 1987. For immediate family funerals the average contribution has risen by over one beast per funeral from 3.52 to 4.65 cattle per funeral in seven years, an increase of 32%. For other *fa'alavelave* it has risen from 1.51 to 1.71 cattle per *fa'alavelave*, an increase of 13%. For all *fa'alavelave* the average contribution has risen from 2.24 to 2.98 or an increase of 33%.

But does this mean that *fa'alavelave* are having an increasingly severe impact on smallholder cattle herds? The data analysed so far would suggest this is the case. The proportion of the herd these same *fa'alavelave* were consuming in 1987 and 1994 was calculated. This is shown in Table 5.10.

Table 5.10 shows that despite all the previous increasing trends we have found, the percentage of the herd contributed to *fa'alavelave* has decreased dramatically, from 28% of the herd per *fa'alavelave* in 1987 to 14% of the herd per *fa'alavelave* in 1994 on average. Thus in seven years the impact of a *fa'alavelave* on a herd has halved. But we must also take into account the finding that the frequency of *fa'alavelave* has doubled. Somehow herds are managing to sustain themselves and increase despite this. Herd sizes then, as we will see in Chapter 7, are increasing at a faster rate than the pressure of *fa'alavelave* on them, despite that pressure increasing.

Table 5.10: Percentage of Herd Slaughtered per *Fa'alavelave*

1987 (n=58)	Average	Range	Median
Immediate Family Funerals	48.57%	2-100%	40%
Other <i>Fa'alavelave</i>	16.57%	0-100%	9%
Totals	28.16%	0-100%	12%
1994 (n=60)	Average	Range	Median
Immediate Family Funerals	22.85%	2-100%	14%
Other <i>Fa'alavelave</i>	7.18%	0-20%	6.5%
Totals	13.97%	0-100%	9%

Source: Fieldwork, 1987, 1994.

This is a major finding: overall, *fa'alavelave* are not having a detrimental impact on the growth of the smallholder cattle sector.¹ While contributions of cattle to *fa'alavelave* are increasing, Table 5.10 shows that the impact on herds has significantly decreased. This may be related to herds reaching a threshold number over which the impact of *fa'alavelave* is less disastrous (Maiava, 1993). The importance of herd size in relation to success is also discussed in Chapter 7.

Table 5.10 also shows the same trends identified earlier: that immediate family funerals have a more severe impact than other *fa'alavelave*, and the skew effect, which causes the averages to be non-representative of a typical farmer. Thus while the average contribution has decreased from 28% to 14% of the herd, the median contribution has decreased from 12% to 9%. In addition this table indicates the huge variation amongst farmers in the impact of *fa'alavelave* on their herds, from no impact (0%) to complete loss (100%). These data are from farmers who contributed cattle to *fa'alavelave* so 0% does not indicate non-contribution. Rather it indicates that in some cases a farmer has obtained cattle from elsewhere rather than sacrifice his own herd; he has bought cattle in. This is not common but *fa'alavelave* are starting to provide a market for cattle farmers, as already occurs with pigs and fine mats.

Finally we must consider the impact of *fa'avelave* on breeding stock: heifers and breeding cows. Data on the slaughter of breeding stock for *fa'avelave* are presented in Table 5.11. These data are from the same sample of *fa'avelave* as above, except that in 1994 only data from the one most recent *fa'avelave* were collected, rather than the two most recent *fa'avelave* as in 1987.

Table 5.11: The Contribution of Female Breeding Stock to *Fa'avelave*

	1987	1994
Number of <i>fa'avelave</i>	56	37
No. <i>fa'avelave</i> where breeding stock killed	26	6
% <i>fa'avelave</i>	46.4%	16.2%
Total number cattle	127	97
Number breeding stock	48	13
Breeding stock as % of total cattle contributed	37.8%	13.4%
Average no. breeding stock per <i>fa'avelave</i>	0.86 (n=56) 1.85 (n=26)	0.35 (n=37) 2.17 (n=6)
Median	0 (n=56) 1.5 (n=26)	0 (n=37) 2 (n=6)
Range	0-7 (n=56) 1-7 (n=26)	0-5 (n=37) 1-5 (n=6)

Source: Fieldwork, 1987, 1994.

The most striking observation from Table 5.11 is the rapid fall in the proportion of female breeding stock, as a percentage of the cattle contributed to *fa'avelave*, from 38% to 13%, down to approximately one third of previous levels of contribution. Second is the rapid fall in the percentage of *fa'avelave* to which female breeding stock are contributed, from 46% to 16%, again down to approximately one third of previous figures. To a certain extent this may record not only quantitative data but also awareness. It is possible that the decline indicated may be exaggerated due to increased awareness by farmers that the slaughter of female breeding stock is officially disapproved of, a message they would have been receiving from DAFF throughout that period. But they were also receiving that message prior to 1987 in which case the 1987 figures may have also been underestimated. Thus I am confident that these data indicate real change.

In 1987 the data for the percentage of female breeding stock slaughtered is very stable across different types of *fa'alavelave*. For immediate family funerals 39% of cattle contributed were female breeding stock. For all other *fa'alavelave* this figure was 36%, for all funerals 38% and for non-funerals only this figure was 36%. Overall the figure was 38% (which dropped to 13% in 1994). One might expect that the sudden pressure of a funeral, with no time to plan, might cause a greater percentage of female breeding stock to be killed for funerals but the data do not indicate this.

It must be noted that the absolute numbers in Table 5.11 are not comparable. They do not indicate fewer *fa'alavelave* in 1994, only that a smaller sample of these data was collected. The sample of *fa'alavelave* in which female breeding stock were contributed (six *fa'alavelave*) is too small to draw any statistical conclusions. However, of the thirteen cattle slaughtered, ten were contributed to four immediate family funerals including five to one funeral, that of the owner of the herd, as decided by his elderly widow. In this case these five were the whole herd. These five cattle skewed the data, the rest of the *fa'alavelave* receiving only one or two female breeding stock. The widow made the decision that as the cattle belonged to her husband they should die with him because he deserved to have a good funeral: he had worked hard caring for his cattle and so this was only fitting.

In 1994, of 97 cattle contributed to 37 *fa'alavelave*, 13 were heifers or breeding cows, with an approximate average age of 18 months to two years, 20 were old cows, with an approximate average age of 7.5 years, and 64 were bulls (or steers although steers are rare) with an approximate average age of 2.6 years. These numbers certainly suggest that bulls and not heifers are selected for contribution to *fa'alavelave*. The apparent youth of the female breeding stock slaughtered also suggests they may have been a last resort.

Do farmers plan for future *fa'alavelave*? Farmers were asked if they had any of their herd mentally 'set aside' for the next *fa'alavelave*. These data are summarised in Table 5.12.

In 1987 14% of respondents had some of their herd mentally allocated for *fa'alavelave* but 86% did not. In 1994 the responses were 49% and 51% respectively, an increase from one in seven to one in two farmers thinking ahead about future contributions. Those who did not include, of course, those who had already decided that they would not contribute any cattle at all to *fa'alavelave*. These respondents have been left out of our discussion so far in this

section, but they made up 42% of respondents in 1987. Thus while 14% were prepared and 42% had decided not to contribute cattle to *fa'alavelave*, the remaining 44% would slaughter as necessary when the time came but had not thought about it further.

Table 5.12: Planning of Contributions of Cattle to *Fa'alavelave*

All respondents	1987	1994
Respondents who contributed cattle to <i>fa'alavelave</i>		
a. % who mentally set cattle aside	13.6	48.7
b. % who did no planning	44.0	37.3
c. Total	57.6	86.0
Respondents who had never contributed cattle to <i>fa'alavelave</i>		
d. % who would in future	23.8	} 14.0
e. % who never would	18.6	
f. Total	42.4	14.0
Respondents who planned either now or for the future (incl not contributing) (a+d+e) (%)	56.0	62.7

Source: Fieldwork, 1987, 1994.

For many of those who had decided not to contribute this was only a temporary or conditional decision. Only 19% of respondents said they would never contribute cattle to *fa'alavelave*; that their cattle were not for *fa'alavelave*. The rest expected to contribute in the future. For 10% of respondents their contribution to *fa'alavelave* was reserved only for their parents' funerals while 14% expected to contribute when their herd was larger and their contract with DAFF, which bound them not to kill their cattle until they were old enough, was completed.

By 1994 many of these events had occurred and so the proportion of respondents who had contributed cattle to *fa'alavelave* had risen from 58% to 86%. Obviously some who said in 1987 that they would never contribute cattle to *fa'alavelave* had in fact done so by 1994.

We must now ask which cattle farmers choose to slaughter (whether planned or spontaneously). So, do farmers select particular cattle for slaughter or is it a random process? I asked farmers which animals they chose to slaughter for *fa'alavelave* in 1994. In these questions I was particularly careful not to suggest answers. The question was an open one. The response could have been 'anything' or 'the first one I find', but it was not.

As a first preference 44% of respondents would choose a bull, 19% would choose an old or barren cow and 13% would choose either of these. A further 19% would never or be very unwilling to kill a breeding cow or heifer, totalling 95%. While 13% would choose on the basis of size: as small as possible depending on the *fa'alavelave*, 9% would buy cattle if necessary to avoid killing female, project or their own cattle, 6% had no strategy for choosing because they would rather avoid it altogether, 3% chose wild cattle, for 3% it would depend on the type of *fa'alavelave* and 3% didn't know. As several respondents gave multiple criteria (e.g. a bull but never a breeding cow) the percentages total to over 100%.

These data, together with those in Table 5.12, make it clear that farmers do have strategies and make calculated decisions about which cattle to contribute to *fa'alavelave*. Most choose to not kill female breeding stock. In Chapter 7 the data examined here regarding the contribution of cattle and female breeding stock to *fa'alavelave* will, together with data from herd compositions and the Agricultural Census, be used to challenge the assumptions identified in the literature in Chapter 3.

The major conclusion from the data presented above is that *fa'alavelave* are not having a detrimental impact on the growth of the smallholder cattle sector. While contributions of cattle to *fa'alavelave* are increasing, Table 5.10 shows that the impact on herds has significantly decreased. In other words, herds are growing faster than the demands of *fa'alavelave* upon them.

5.4. Farmers' Thinking about Cattle in *Fa'alavelave*

The above data have shown that *fa'alavelave* are not harming the smallholder cattle sector.² But such empirical data does not adequately describe the attitudes, feelings and personal variability recorded in discussions with farmers. In the following discussion, interviews with cattle farmers in the general surveys in 1987 and 1994, and with villagers in the household

survey of Sato'alepai have been integrated. Most of what follows is told in the farmers' own words.

5.4.1 The Importance, Usefulness and Meaning of Contributing Cattle to *Fa'alavelave*

Everyone was in agreement that cattle had increased in importance in *fa'alavelave*. Furthermore, their importance was continuing to increase: respondents told me that more cattle are included more frequently, as we calculated in Section 5.3. Several reasons for this were given. In Sato'alepai the most important factor was that cattle were so useful for all different kinds of *fa'alavelave* (42%), that they were big in size (35%) and that they saved money by reducing the amount of money that had to be spent on *fa'alavelave*.

Farmers often told me how "useful" cattle are for *fa'alavelave*: they are always on hand, and one cattle beast is enough, nothing else is required. That is, when a farmer contributes a cattle beast he does not also have to give pigs, money or other goods. He does not have to go to the bank, 'search for money' from his relatives or go to the shops and buy goods, possibly on credit. Nor does he have to kill possibly several pigs and cook them. A cattle beast can easily be shot, the butchering process takes about twenty to thirty minutes, it is then transported on the back of a pick-up and that is all. It does not need to be cooked (and sometimes you can slice off a bit for your family and no-one will ever notice). In other words cattle have the characteristic of any successful new technology: they make life easier.

In most cases, particularly funerals, the timing of *fa'alavelave* is unpredictable. Even when they are known to be coming the cattle owner probably has little individual control over their timing. And yet, as we saw in Chapter 2, it is a basic need to have at least some control over one's life. Development, as much as it is about material and physical development, is also about increasing control and reducing uncertainty. Cattle enable farmers to have one more tool to cope with the uncertainty of the timing of *fa'alavelave* which is exacerbated by the certainty that a contribution of some sort will be required.

One of the first observations to impress me in 1987 was the diversity of views held about *fa'alavelave* and cattle in them. The attitudes to *fa'alavelave* varied enormously. While 19% of respondents felt they were very important, 14% felt they were not important at all. The majority, however felt that they were important (27%), or at least some were important

(39%), especially the funerals of close relatives. Respondents distinguished very clearly between important and less important funerals as we have seen, and cattle were reserved solely for important *fa'alavelave*. While 45% of respondents would give cattle to important funerals (and 26% would give pigs, 22% money and 5% would buy in goods or substitutes), no-one would give cattle to what they considered to be less important *fa'alavelave*. Cattle, then, had become a measure of importance: if there were cattle then the occasion was considered important, but if there were no cattle then the occasion was considered not so important, even if once it might have been considered important. To less important *fa'alavelave* 55% of respondents preferred to give money if they could (much quicker and easier) or pigs (34%) or bought goods such as cartons of tinned fish (9%). Cattle were too valuable to contribute to occasions such as a distant relative's funeral or title conferment. Cattle, then, have caused *fa'alavelave* to be more consciously divided into different types: cattle-worthy and non-cattle-worthy. Of course two households could consider the same *fa'alavelave* to be of very different importance to them.

The main motive for contributing to *fa'alavelave* generally (not just cattle) was expressed as *alofa* (love) and wanting to help their own family in a time of need (32%). This is expressed as "supporting the family" (*fesoasoani i le aiga*). A further 3% of respondents expressed it as "looking after" or showing respect to their parents. Twelve percent contributed because it was their duty and responsibility as a *matai*, 10% to maintain family ties and hold the family together (including maintaining social security), and 9% to avoid criticism or shaming of the family name. Seven percent did so out of expectation, obligation, obedience or pressure. Twenty-five percent expressed it as the custom, *fa'a Samoa* (the Samoan way). These respondents were not really able to analyse their behaviour further, they simply did it because that was the way things were done. Only 2% felt able to acknowledge they contributed for purposes of status, pride and praise, something 10% of respondents were able to say was the objective of others but not themselves.

When cattle were added to the equation the emphasis changed. Giving cattle added an extra dimension of satisfaction and status. For the villagers of Sato'alepai who owned cattle, 42% were pleased to contribute cattle to *fa'alavelave*, because they gained the satisfaction of making an important contribution. It was the sense of pleasure or satisfaction that was important to them. To 19% it was the gaining or maintaining of their status which was important. Fifteen percent contributed because it was the culture and therefore appropriate.

Their feelings were fairly neutral. Only 19% hesitated to contribute cattle, saying that they would only contribute cattle if a pig or money was not available or if their herd size was big enough to recover from the loss.

In important *fa'alavelave*, then, cattle represented first love, respect, connection and commitment within the family and to visitors, and second the status of the deceased, the contributor, the family and the guests. Cattle were given first to the owner's immediate family to then be used by the family to give to visitor groups in exchange for fine mats, money and other gifts. In that sense it is given twice and means slightly different but similar things each time. When a son, for example, contributes a beast for his father's funeral, he first, in a sense, gives it to his father as an expression of love and respect and to represent his father's status. When it is then given to visitors in exchange for their gifts it represents the connection to those visitors, who are usually extended family, as well as love, appreciation and status of both the givers and the receivers.

It was also extremely important that there was "enough" (*ua lava*), a quantity that was intuitively calculated. No one was able to tell me how much "enough" was, except that it provided them with a sense of satisfaction. It was related to the exchange: it was important that all gifts received were responded to with return gifts that acknowledged and showed sufficient respect and appreciation of the first gift. The quantity required to do this was "enough".

Cattle have caused indirect changes to *fa'alavelave* particularly in the giving of other things. Giving a cattle beast is enough (because of its size and status) - it substitutes for all other things and one doesn't need to give anything else. Cattle make it easier for a family to contribute because they are available and save money or they save having to find money or raise credit. Less is spent on cartons of tinned fish. While small farmers avoid giving, those with large herds of 30 or more cattle (a figure selected by respondents) are able to give easily.

5.4.2 The Social Context of Contributing Cattle to *Fa'alavelave*: Obligation, Motivation, Ambivalence and Change

The social rewards for contributing cattle are high: the giver of cattle is respected and highly praised for their generosity. They are seen as owning property and having lots of money.

However, they do not get back as much in value in exchange. Cattle make a family feel important but this may be only temporary glory if they are used for showing off (*fiatagata*). If people have given beyond their means or when it was not necessary this will be noticed, and the moment of glory is fleeting for such people. However, greater expectation has been placed on cattle owners and has affected people's attitude to cattle farmers. Relatives want cattle owners to contribute a beast so they can share the reflected glory.

Relatives, as we saw in the case of Iosefa, are usually supportive of the cattle owner. Ninety percent of respondents said their relatives realised the value of their cattle. Thirty-two percent had relatives who were happy (*fiafia*), pleased and proud for the owner, the relatives of 18% were pleased because cattle could be contributed to family *fa'avelave*, 14% were pleased that cattle added to the status of the family and 8% were inspired to get cattle for themselves. In total then, 72% of respondents felt supported by their relatives, even if it was for purposes of reflected glory. However, 12% felt their relatives had a neutral attitude to their cattle and 16% felt that at least some of their relatives were jealous, wanted to have some of their cattle, or pressured the owner to give to *fa'avelave*.

Fa'avelave were felt to be a burden by respondents in a general sense. For 56% all or most were felt to be a burden, for 19% some were a burden and only 25% felt no burden. In discussing *fa'avelave* it was interesting how farmers were able to blame the culture and others but not themselves. While 90% felt some or most people gave too much, they themselves simply gave "enough" (the appropriate amount). There was also considerable inconsistency between what they stated they gave and what they actually gave, and between what they wanted to give and what they actually gave. Forty-eight percent of respondents showed some inconsistency, whether wanting to give more or less cattle.

Contributing cattle to *fa'avelave* created considerable emotional turmoil for the owner. I asked about this in both 1987 and 1994. In 1987 only 30% of respondents felt pleased and satisfied about their recent contributions which we analysed in Section 5.3, but by 1994 50% felt pleased and satisfied about their recent contributions. The number that felt neutral fell from 14% to 11%, the number that were both pleased and disappointed (ambivalent) fell from 14% to 11%, the number that felt disappointed fell from 36% to 26% and the number that felt anger because they were pressured fell from 6% to 3%. Thus in 1987 an

extraordinary 70% felt neutral, ambivalent or negative about contributing cattle to *fa'alavelave* and in 1994 50% felt this way.

As we have seen, in a *fa'alavelave* a cattle beast is given to the immediate family first and then the extended family. Thus a man might say he contributed cattle to his father's funeral but it was the extended family who ended up with the beef. It is perhaps this paradox, and the tendency towards immediate families in most other respects, that could be an explanation of the ambivalence towards contributing cattle to *fa'alavelave* felt by many respondents. Another is the ambivalence and even anger already felt towards parents that we discussed in Chapter 4. Contributing cattle to their parent's funeral, may, for some, be the last attempt to appease their parent and express a love they are unable to feel. In addition, of course, many respondents are aware of the impact on their herd and would rather use their cattle to earn money and support their own nuclear family. Forty-eight percent of respondents said the impact of the most recent *fa'alavelave* had affected their plans for their herd.

In Sato'alepai 77% said that at some time they had felt pressured to kill cattle for *fa'alavelave* when they personally did not want to. However, this pressure was of diverse origins, and much of it self-imposed. Surprisingly only a few respondents reported direct pressure from *matai*. There was more pressure from people who asked to purchase cattle for use for *fa'alavelave*. (Some of this included pressure or expectation from extended family to sell at a reduced price. However, non-family wanting cattle for an unrelated *fa'alavelave* would, in the face of the owner's reluctance, pay the market price). Most pressure was self-imposed because the respondent knew their duty as a *matai*, faced the expectation of some form of contribution, or had no alternative or no money available. But pressure was not only imposed by *fa'alavelave* but also by the need for income.

The pressure felt by many respondents in the general survey was also both self-imposed (that is, indirectly imposed by socialisation and/or the responsibility of being a *matai*) and externally imposed. While 54% said they never felt any pressure, 11% felt obligated, 9% felt they had no alternative, and 9% were aware of unspoken family need (of which they may have been the *matai*) and 2% felt the pressure of custom. For the latter 31%, then, the pressure was unspoken. Only 15% faced any spoken pressure: 6% were instructed to

contribute cattle by their father or *matai*, 7% were asked to by family members and 2% faced possible sanction from the village council (in the case of a fine).

Sometimes the contribution is stipulated in the case of conferment of *matai* titles. For example a radio announcement in 1987 made to candidates for the title Taulapapa from Aleipata was recorded as follows: each candidate was to submit two cattle beasts, \$50, ten cartons of tinned fish, five pigs, twenty packets of biscuits and thirty fine mats to the current title holders for exchange during the *fa'alavelave*. In this case the candidates had no choice: if they did not make the contribution they would not receive the title. (Once again, their immediate families would make up the contribution).

However, farmers are not always strictly bound by the requirements and pressures placed on them. Knowing their culture well, they sometimes worked around it to balance their financial investment and social obligations. Many devised avoidance strategies to protect both their herd and their reputation. In Chapter 4 we saw that this behaviour was integral to Samoan culture: saying one thing and doing another, telling lies or simply making plausible excuses without actually refusing. Stealing is part of this behaviour as well and unfortunately is now a large threat to many cattle farmers as cattle have become more important in *fa'alavelave*.³

Some farmers minimised their contribution of cattle to *fa'alavelave* by using their contract with DAFF (which included penalties) and their small herd size as an excuse, arguing that when their herd was bigger they would be able to contribute more in the future. One farmer pretended his cow was pregnant. Another strategy was to pretend not to be able to find the cattle deep in the undergrowth perhaps several miles back in the plantation. Several deliberately raised a lot of pigs to substitute and one sent money from Pagopago to substitute. Several simply refused, balancing the importance of the *fa'alavelave* with the likelihood of social repercussions. Some, created a self-imposed rule which they made clear to others, that they only contributed cattle to funerals or that their cattle were only for their parents' funerals. Of course, to a certain extent the ability to say no depended on the status and authority of the owner, but this was not the only variable. Sometimes younger but more independent, educated or urban-based owners felt they could 'buck the system' without significant sanction. On the other hand it must be remembered that often farmers sincerely

want to contribute to a particular *fa'avelave*: for some they are pleased to contribute and for others they would rather not.

Thus 53% of respondents had at one time or another said "No" to requests for cattle for *fa'avelave*. Fifty-eight percent of the respondents who had said "No" said there had been no repercussions at all for refusal; 35% were criticised, and 6% faced reprisals. In one case a cattle owner was verbally abused and nearly punched by drunk opponents for refusing to contribute cattle to a *fa'avelave* but he had stood his ground. It must also be remembered that the great majority of respondents were *matai* and so either had the authority to decide or at least negotiate with other *matai* of similar status in the family or village. Even so, some untitled owners had refused. Samoan culture is not as inflexible as some would believe. Farmers are constantly making decisions regarding the relative value they place on social relationships and 'modern goods' on the basis of their own goals, sometimes sacrificing one or the other depending on the circumstances, but sometimes, by the use of culturally acceptable strategies, sacrificing neither.

Eighty-six percent of respondents felt that the slaughtering of cattle for *fa'avelave* was a problem for the development of Samoa, (slaughtering by other people that is). But this also reflected conditioning whereby Samoans have become accustomed to thinking that their culture is a hindrance to development. Respondents believed people gave because of the importance of the custom, of *fa'a Samoa*, because of social obligation and duty, because there was no alternative and because of the importance of family ties. It was the way they had been brought up. Some blamed pride and the seeking of praise and status while a few blamed lack of education. Furthermore, people gave cattle, they recognised, because cattle were available. Some, they said, do not care about cattle as a business. Certainly most felt the conflict between using cattle for traditional and modern purposes and many cattle farmers showed ambivalence towards their culture as explained in Chapter 4.

But traditional values and development are only infrequently mutually exclusive. Indeed a strong case can be made that *fa'avelave* actually promote cattle production by providing a motivation. In 1987 20% of respondents gave *fa'avelave* as the main reason for starting to farm cattle. Many farmers wanted to increase their herd size in the future for this reason, and gave this as an excuse for not slaughtering for *fa'avelave* at the present time. In 1994 I asked farmers directly whether they felt *fa'avelave* were a constraint or a motivation in

their cattle farming. For 37% *fa'alavelave* were a motivation while for only 5% they were a constraint. Fifty-eight percent, however, were ambivalent and found it hard to answer this question. While some felt they were neither, some felt they were both: yes they were a motivation and yes they were also a constraint, reflecting the dilemmas they faced on an almost daily basis. There was a tendency to contradict themselves and blame others: to acknowledge personal motivation but blame giving by others as a constraint to the industry in Samoa.

In Sato'alepai 50% felt that *fa'alavelave* were a motivation for farming cattle, 27% felt *fa'alavelave* had a neutral effect, 14% viewed them as a constraint and an ambivalent 9% saw them as both a constraint and a motivation.

Finally, I would suggest that farmers have been through a learning process as they have incorporated cattle into *fa'alavelave*. In 1987, while 30% were pleased and satisfied with their most recent contribution of cattle, only 14% anticipated that they would be pleased and satisfied by their next, (unknown), contribution. While 29% had been neutral or ambivalent about their past contribution, no-one held these views about their future contribution. Intentions for the future were much clearer with 9% knowing they would be disappointed but would still give cattle, 35% declaring they would refuse to give, 31% being more discriminating and only giving if important or essential, such as to their parents' funerals, and 12% resolving to wait until their herd was larger.

However, while 29% were more likely to say no to contributions of cattle in the future, 15% were more likely to say yes, once their herd was larger (12%) or their DAFF contract was finished (3%). Twenty-one percent would still say yes and 35% would still say no. Intentions are a fine thing however, and, as we have seen in Section 5.3, between 1987 and 1994 giving increased significantly. By 1994 herds were larger, the original DAFF contracts had finished and many of those who had resolved to reduce their contributions of cattle had in fact given more. Considerable emotional conflict was involved in many of these decisions. On the other hand, many respondents were accepting of *fa'alavelave* as part of their lives and also part of their responsibility and duty as *matai* and so did not suffer the internal conflict others did.

In 1994 I asked respondents if, how and why attitudes to cattle in *fa'alavelave* had changed in recent years. This was an open question designed to allow farmers to tell me anything they were aware of, whether in their own or others' behaviour. Fifty percent reported no change, they would either still give or they would still not give cattle. The other 50% were aware of change. Seventeen percent had recognised the impact of *fa'alavelave* on herd sizes and were motivated by the desire to increase their herd size, whether to give more in future or to make more money from cattle. In 1994 farmers were much more concerned with the size of their herds than previously and almost universally wanted to increase their size.

Fifteen percent said they were much more hesitant to kill cattle for *fa'alavelave* and tried to substitute other things before giving cattle as a last resort. Six percent said they now realised how useful, helpful and dependable cattle were for *fa'alavelave*. This included a respondent who lamented the fact that he no longer had cattle. Six percent were respondents who were the sons of the original owners who had died since 1987. They noticed a difference between the generations: a reduced willingness to slaughter for *fa'alavelave* and 'better' (more business-like) management of the herd. Six percent said their attitude had changed when they became a *matai*: they now had new and important responsibilities and expectations placed upon them. Four percent noticed much greater discrimination between different types of *fa'alavelave*: which *fa'alavelave* cattle were contributed to, and how many cattle would be contributed to different *fa'alavelave*. Four percent recognised that cattle were now only given to the immediate family and less or none to the extended family. (Those who were aware of change do not add to 50% as some respondents gave more than one response).

Smaller numbers of respondents lamented that they had learnt their lesson from slaughtering their entire herd, or generally felt a greater reluctance to give cattle now, while others were more aware of increased pressure and expectation. Some just hoped and prayed there would not be a *fa'alavelave*, while others were more aware that they calculated their contribution based on what they anticipated they would receive in return and in comparison with what they could get from a butcher. Many of these respondents were aware of the changes that we discovered empirically in Section 5.3. They were aware that changes were occurring within their own cultural practices. But probably the most important observation is the great diversity of views and attitudes among Samoan farmers.

More specifically, with regard to their own contribution of cattle to *fa'alavelave*, farmers were aware of many changes. Only 24% said they had not changed. Twenty percent gave less, avoided, limited or substituted for their contribution, 15% were more selective of the occasion in deciding whether to contribute several or few cattle or to substitute with something else, 12% had come to a position of total hesitation, trying not to give to any *fa'alavelave* at the present time, 10% now gave cattle to the immediate family only (which couldn't be avoided) and 10% now gave to funerals only, and only to immediate family funerals (or in some cases immediate family *matai* funerals only). These respondents refused the extended family or substituted with pigs or money if possible. Five percent said that while they had changed, some contributions of cattle were still unavoidable. Five percent said they might kill and sell a beast and then use only part of the money to buy substitutes and keep the rest of the money. In this way cattle were still very useful for *fa'alavelave*. On the other hand, 5% bought cattle from other farmers if possible or sent money for the family to buy cattle while 2% had started to sell cattle to others for *fa'alavelave* as a business. Five percent said that because their herd size was larger now and they were better able to manage their herd (and/or they had become a *matai*) they were now giving more. Others said they gave smaller animals, were more selective of which animal they killed, or said no to all requests in order to avoid accusations of favouritism. Such a stance was generally respected by families. (The above do not add to 76% because some farmers gave more than one response).

What we can learn here is not just that changes were occurring but that an enormous diversity of strategies was evolving in response to the introduction of a new technology into a traditional context. There was also considerable consistency between how farmers said they were changing and the changes that were actually occurring, as outlined in Section 5.3, such as discriminating between *fa'alavelave*, and concentrating on the immediate family and on funerals. However, farmers seemed to believe they were giving less when in fact they were giving more. They certainly wanted to give less and were instead evolving strategies to try and cope with the demands they experienced and their hopes for the future.

5.4.3 Cattle and Pigs in *Fa'alavelave*

In the 1950s and 60s pigs played a much more important role in *fa'alavelave* than cattle. Cattle were not important in *fa'alavelave* because:

"to give a cow would be excessively generous. Not only would it be difficult to butcher, but it would provide only one gift; and, in a land where ceremonial giving is characteristic of community mores, frequent repetition of such a gift would quickly deplete cattle numbers and spell doom to the owner of a large herd" (Farrell and Ward, 1962:229)

In addition, few families had cattle then. But Farrell and Ward were both incorrect and correct. Cattle did become more important but in the process many farmers did find their herds quickly depleted.

The vast majority of respondents were in agreement that cattle have become the main contribution to *fa'alavelave*, while a very few believed that pigs were still more important than cattle, especially at weddings. However, most agreed that cattle are now more important than pigs or anything else because of their size and their status: one cattle beast 'beats' any number of pigs or cartons of tinned fish. Cattle are contributed to important *fa'alavelave* while pigs are contributed to small or less important *fa'alavelave*. Now pigs are no longer enough and it is no longer possible to have a funeral without a cattle beast to show the highest respect to the deceased.

I noticed a dramatic decline in the number of pigs at *fa'alavelave*: at one I saw only one pig and at another there were none. Part of the explanation might be that after cyclone Val pig numbers declined because there was not enough spare food to feed them and they were eaten instead. Pig numbers may have recovered since. In addition, however, with the trend towards nuclearisation of families, more houses are being built in villages, leaving less space for pigs (Misa Telefoni, pers. comm., 1994).

There is an hypothesis that the role of cattle in Pacific cultures is that of honorary pigs (Ponter, 1985:12). However, I do not agree with this in the Samoan situation for several reasons. Cattle and pigs have very little in common. They are farmed differently: pigs are attended and fed daily and live close to the village. Cattle live much further away in the plantations and are not fed. Pigs breed quickly while cattle breed slowly. These are the differences obvious to farmers.

Pigs are killed differently (strangled rather than shot), they are butchered differently, they are cooked for presentation and are presented whole. Cattle on the other hand are not cooked and are given in parts. The parts of the body that have significance are different: for pigs the head and shoulders are the most important parts for symbolic reasons. With cattle, in contrast, it is the most meaty parts, the hind quarters, which are given, for reasons of practical generosity not symbolism.

Many of these things are for very practical reasons. Pork must be well cooked because the meat will go 'off' very quickly, whereas beef does not. Cattle must be cut up for practical reasons because it is so big. But if the hypothesis were correct one would expect the significance of parts of the body to remain constant which did not happen.

In fact, the only characteristic that cattle and pigs had in common was that they were both useful and prestigious as contributions to *fa'alavelave*. If cattle are honorary pigs then they are also honorary fine mats, honorary money and honorary cartons of tinned fish. It is not that cattle represent pigs but that cattle, pigs and fine mats all represent love, connection, commitment, respect and status. It was farmers however, who told me that they view cattle and pigs quite differently, not least because they farm them differently.

There are things that one can do with cattle, because they are not traditional and there is not an established protocol, that one cannot do with pigs. For example cattle (including parts such as legs, about the same size as a pig) are presented uncooked (which is much easier). If pigs were presented uncooked (which is unheard of) it would be an outrage, extremely rude and insulting. In other words traditional protocol associated with traditional objects is inflexible. But by introducing new objects, changes that are more practical (for example, less work) can be made within traditional contexts.

5.5 Conclusion

In conclusion, then, just as *fa'alavelave* have had considerable impact on the farming of cattle in Samoa, so cattle have had considerable impact on the traditional exchanges that are *fa'alavelave*. Their impact is not without the turmoil, personal conflict and anxiety, or the contradictions that characterise Samoan culture, but they are highly favoured. Their use in *fa'alavelave* reflects the central values of Samoan culture: love of parents and family,

commitment to family, respect for the *matai* system as well as the constant need to uphold family honour and status. This can be traced to the values taught during socialisation that were described in Chapter 4. This is why the pressures Samoan cattle farmers face are as much internally as externally generated.

As a contribution to *fa'alavelave* cattle represent love and the reaffirmation of social ties. They are the physical evidence of commitment to parents, immediate family, extended family, *matai* titles and the church. They reflect the use of material goods to express love. In Samoan culture social security is believed to depend not on productivity but on distribution through reciprocity and generosity. *Fa'alavelave*, and the use of cattle in them, are central in the practice and expression of these values. It may be concluded that the farming of cattle for these purposes is a caring practice, motivated by the universal commitment to family.

Cattle have also become a status symbol. As signifiers of both family loyalty and status, which, as we saw in Chapter 4, are very important to Samoans, they are no different to pigs, fine mats or money. But because of their size relative to even the largest pig, their scarcity in that only some people have them, while most people have pigs, and their ability to imply considerable sacrifice for the sake of the family, all of which contribute to their ability to impress and imply status, cattle have now become more important than pigs and virtually essential in any *fa'alavelave*. One farmer expressed it this way: "If an unimportant *fa'alavelave* has any cattle it is considered important, but if an important *fa'alavelave* does not have any cattle then it is not considered important".

But changes in the incorporation of cattle into *fa'alavelave* also reflect the bigger changes that are occurring in Samoan society, particularly the move towards immediate rather than extended family ties. The incorporation of cattle into them also reflects the dilemmas faced by Samoans as they try to modernise. To try to conclude whether *fa'alavelave* provide a motivation or constraint for cattle farming invites an ambivalent response but the motivating force is much more dominant. Chapters 6 and 7 will explore this question further, but this study can conclude here that Samoan farmers are active, reasoning and strategising in the decision making and management of their herds for *fa'alavelave* and other purposes. They are certainly not passive in their views and actions. Planners must include this in their planning, and instead of viewing *fa'alavelave* as constraints, view them as motivations. It may be suggested that it is the incorporation of cattle into Samoan culture and *fa'alavelave*

that explains the success of smallholder cattle farming. Chapter 7 will further analyse the success of smallholder cattle farmers and the empirical basis of the assumptions surrounding cattle in *fa'avelave* that were outlined in Chapter 3.

As cattle have been incorporated more and more into *fa'avelave* cattle farmers have been through a learning experience as they learnt about this new technology (for example that they cannot replace cattle like pigs: that cattle breed very slowly in comparison to pigs). This thesis does not dispute that many farmers 'overdid it', contributing too many cattle, sometimes their entire herd, and that many of the anecdotal stories are true. Several farmers expressed regret and many the ambivalence described in Chapter 4. But the evidence presented in this chapter and further in Chapter 7 shows that farmers have learnt from their experience and that *fa'avelave* are not the problem imagined.

There are conclusions that can be drawn with regard to development projects as well. As this research between two points in time revealed considerable change, it raises issues relevant to project evaluation, which conventionally only occurs at one point in time. Conventional research, which presents a static picture, is unable to record change and is therefore unable to provide all relevant information to project and development planners. Furthermore, this research suggests that change relevant to the long-term sustainable success or otherwise of a project continues to occur for many years after a project is 'completed', but is seldom evaluated.

It was proposed at the beginning of this chapter that *fa'avelave* form a test case of the role of culture in development and of the views widely held by project planners and consultants about traditional cultures. These views and assumptions are derived from modernisation theory: that traditional cultures and cultural practices, such as *fa'avelave*, are a constraint to development. But this chapter has found no evidence that the incorporation of cattle into *fa'avelave* has acted as a constraint to the development of cattle herds and the smallholder cattle sector. If the contribution of cattle to *fa'avelave* slowed the process down, this is balanced by the motivating factor provided by *fa'avelave*. It can be argued that a slower but more sustainable process leading to a more sustainable equilibrium in the long-term is not a failure but a success. This issue will be discussed further in Chapter 7.

The findings presented here suggest that it cannot always be assumed that traditional practices are a constraint to development, and therefore that modernisation theory is flawed in making that assumption. The implications for theories of development are discussed further in Chapter 8. But first Chapter 6 examines the role of cattle in Samoan villages, society, and the farming system, in order to continue to assess the role of Samoan culture in inhibiting or promoting smallholder cattle farming.

¹ It is acknowledged, that presumably herd sizes might have increased faster if it were not for the effect of *fa'alavelave*. On the other hand, herd sizes might have been smaller if it were not for the motivating effect of *fa'alavelave*.

² See footnote 1.

³ I do not mean to suggest that any of the respondents in this study had adopted this behaviour.

Chapter Six

Cattle in the Samoan Village, and Social, Livelihood and Farming Systems: Farmers' Experience with Cattle

6.1 Introduction

Chapter 5 examined the role of cattle in *fa'alavelave* and the impact of *fa'alavelave* on cattle herds, and argued that *fa'alavelave* are not a significant constraint to the development of the smallholder cattle sector in Samoa. Chapter 6 asks the question whether other wider aspects of Samoan culture and society are a constraint to the development of the smallholder cattle sector, and if so which aspects are significant. It also asks the same questions of the livelihood and farming systems.

The purpose of this chapter is to further investigate the validity of the assumptions made by development practitioners about Samoan cattle-farming behaviours outlined in Chapter 3, and to further examine the contrast in perceptions between development practitioners and cattle farmers. The behaviour of Samoan cattle farmers is examined for passivity or activity and whether they adopt cattle as expected or adapt cattle for their own cultural and livelihood requirements.

Throughout this thesis the objective is to examine these questions from a position of being well and accurately informed by getting as close to farmers and villagers as possible and endeavouring to understand and present a view from their perspective. To begin, then, the distribution and place of cattle in the villages of Samoa is examined, using the village of Sato'alepai as a case study.

The interaction between cattle and Samoan society is examined; both the impact of cattle on Samoan society and the changes in it that they reflect, and the impact of Samoan culture on

cattle and cattle farming. Emigration, major life events and stealing will be discussed as they impact on cattle herds, as well as the role of cattle in land tenure and social change.

The second part of this chapter places cattle in the livelihood and farming systems, and describes farmers' experiences and the problems and issues important to them. Technical issues which have impacted on the development of a smallholder cattle industry in Samoa, including breed, fertility and disease, are examined from the farmers' perspective.

This chapter closely examines the experiences of cattle farmers in Samoa: their attitudes, problems and capability in managing cattle, including the development of new initiatives. It examines whether farmers are passive recipients in projects or are active in managing and utilising cattle according to their own criteria. That is, it examines their response to cattle as a perceived opportunity, in order to compare and contrast it with the response and behaviour expected by project planners.

6.2 The Distribution of Cattle in the Villages of Samoa

There are "about 330" villages in Samoa (Department of Statistics/ Department of Agriculture, 1990:1). In the 1989 Agricultural Census (ibid, 1990) 15,474 households were enumerated and 11,099 agricultural holdings identified, of which only 7% were commercial (ibid:28). It recorded that 91% of households kept livestock (pigs, poultry or cattle), even though only 70% of households were classified as agriculturally active (ibid:25). Overall 2,200 households (14%) kept cattle (ibid:35) (while 83% kept pigs and 86% kept chickens). However, in the rural areas the percentage of households that kept cattle were higher: in the 'Rest of Upolu' and Savai'i the figures were 19% and 27% respectively (ibid:34).

The distribution of cattle between Rural Upolu (excluding North West Upolu) and Savai'i (which have similar human populations) is about the same with each having about 5,800 cattle or 43% of the national herd in 1989 (ibid:34). However, Savai'i has the highest proportion of households with cattle, at 27%, compared to 19% for rural Upolu (ibid:34), indicating that in Savai'i herd sizes are smaller but more widely distributed. This was consistent with this research as well as will be seen in the study of Sato'alepai..

Percentages and numbers of cattle in the household sector are reproduced in Table 6.1. The research for this thesis was largely conducted in the 'Rest of Upolu'. For further data on the geographical distribution of cattle, the reader is referred to the Report of the Agricultural Census p35 and Tables 10-13.

Table 6.1: Percentage of Households Keeping Cattle in Samoa

Area	Cows	Bulls	Other Cattle	Any Type of Cattle
Apia Urban Area	2	1	1	2
North-West Upolu	2	2	1	3
Rest of Upolu	18	13	6	19
Upolu	8	6	3	9
Savai'i	25	18	10	27
Western Samoa	13	9	5	14

Source: Agricultural Census Table 5.6 (Department of Statistics/ Department of Agriculture, 1990:34)

The average herd size was six animals. However, of households with cattle, about 50% of households had three or fewer cattle and only 15% of households had ten or more cattle. These larger herds of ten or more cattle accounted for 53% of the total household cattle herd (ibid:35). The distribution of herd sizes in the household sector for the whole of Samoa is shown in Table 6.2.

It should be noted that the census was taken before two cyclones (1990, 1991) and the taro blight (1993) which observers believe had a major impact on agricultural numbers and activities. Thus the census is a snapshot rather than a document to be relied on for making future projections. The impact of these environmental disasters on cattle is discussed in Section 6.4.

Table 6.2: Distribution of Herd Sizes in Samoa

Herd Size	Number of Households With Herds	Number of Cattle
1	381	381
2	442	884
3	320	960
4	234	936
5-9	493	3,139
10-19	232	2,882
20+	96	4,249
Total	2,198	13,431

Source: Agricultural Census Tables 12 and 13 (Department of Statistics/ Department of Agriculture, 1990:82,83)

It is obvious from Table 6.1 that many families have cattle but other families do not. It is important, then, to consider how cattle are distributed in the villages of Samoa and how this impacts on social relations. A case study of the village of Sato'alepai is used to explore this issue. This case study also allows the opportunity to see how, in one village, smallholder cattle farming has developed over time.

The village of Sato'alepai is on the north-eastern tip of the island of Savai'i. It was the base for the photographic essay of Samoa by Sutter (1971) and featured in many of his photos. For the present study all 24 households in Sato'alepai were surveyed in 1994. This covered 248 people, an average of 10.3 people per household. The number of people per household ranged from 4 to 18.¹ A group of cattle owners were also collectively interviewed.

Of the 24 households, a surprising 22 households (92%) had cattle. A much lower figure was expected because in 1987, when I had first interviewed here, only 12 households (50%) had cattle. In 1989 the Agricultural Census recorded that 27% of households in Savai'i had cattle (Department of Statistics/ Department of Agriculture, 1990:34). This village may, then, be atypical, or simply be within the range in a very dynamic context.

Experience with cattle in the village had begun in 1977 when the Sato'alepai Village Association received six subsidised cattle from the Department of Agriculture under the

Rural Development Programme. Their goal was to use the profit to buy a village truck. The number of cattle apparently rose as high as 60 but:

"By 1987 they had 22 cattle and were still progressing towards their goal. In the meantime the cattle had provided an important resource for both income and *fa'alavelave*. For example the Association had been able to contribute three cattle to the village pastor's funeral" (Maiava,1993:252)

However, between 1987 and 1994 the village herd first grew to about 50 to 60 head and then declined to zero in 1991. The decline was clearly related to the concurrent increase in the number of cattle owned by individuals, brought from outside the village. People with their own cattle neglected the village herd, failing to contribute to activities such as maintaining fences, while only those without cattle continued to put in the work. This led to a considerable amount of tension and division, especially when individuals' cattle were run together with the village cattle.

At the same time considerable demands were placed on the herd and villagers were much more willing to agree to village cattle being used instead of their own cattle. When the high ranking (and former Prime Minister) Efi gained the Tupua Tamasese title \$2,000 was raised from the sale of cattle and a further three cattle beasts were contributed. In addition, cattle were sold to raise \$6,000 which was used in building a new church for the village and associated church functions and activities. Contributions to church conferences were also made.

Contributions to the district school for maintenance and to the repair and reopening of the hospital were also made. Two animals were contributed to church dedications, two were used for White Sunday and five for funerals of matais of the village. Cyclone Ofa killed one animal which left two animals remaining. These last two were lost because fences, broken in the cyclone, were not repaired.

The villagers themselves readily acknowledge, in hindsight, that it was the conflict of interest between desiring and caring for individually owned cattle rather than communally owned cattle that led to the demise of the village herd. Once the desire for individually owned cattle was widespread there was no desire to maintain a village herd. But because, in

this case, it was not really acceptable to admit to this, the village herd was simply neglected rather than the difficult decision made to split it up among the members. While Samoans are moving towards more individualistic behaviour they have difficulty admitting this is happening.

The villagers were "pleased and satisfied" that they had the cattle as a resource during that time so that they could contribute but "very disappointed and sad" that they no longer had this resource. Nevertheless they said they would do the same thing again because it was necessary at the time and was what the *matais* had decided was the right thing to do. They had no plans or desire to start up another village herd. This is an example of the ambivalence often found: the holding of two opposing views at the same time without any sense of contradiction. The original goal of purchasing a village truck was never achieved but had in itself become outdated between 1977 and 1994 as more and more people acquired their own vehicles.

We can see from these examples that the demands on cattle are many and varied. Village herds are more vulnerable to community demands (just as it is easier to spend someone else's money) but what we can see is the random nature and unpredictability of the demands. An individually owned herd will face fewer community demands but more family related demands such as family funerals and title conferments.

It is worth noting that in 1997 there were 95 cattle in the village, exceeding the number ever farmed by the village association. Undoubtedly the demise of the village herd indirectly assisted the increase in numbers of individually owned cattle by diverting and absorbing the pressure to contribute cattle during the start up period.

Another advantage of the village herd was the experience gained from training and support from the Livestock Section of DAFF which was rated very highly by villagers. Vets had come when needed and given training on site. This contributed to the success of the village herd and the creation of a positive attitude to, and confidence with, cattle in the village. The high income obtained from cattle was also an important factor.

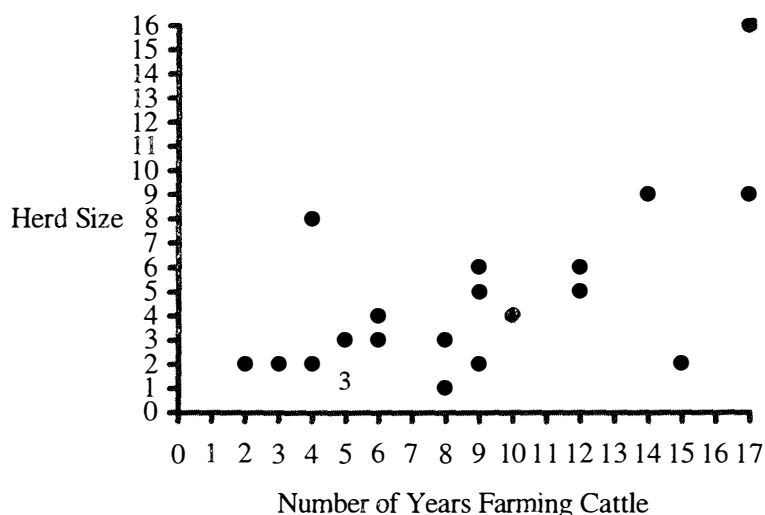
But as the village herd was declining, individual household herds were increasing. If the village herd had been redistributed to villagers this could account for so many households having cattle, but this was not the case here.

The first individually owned cattle herds began in 1977 when two households obtained (heavily subsidised) cattle from the Department of Agriculture. Until 1982 the Department of Agriculture was the only source of cattle and in total the Department of Agriculture was the only source of cattle for 27% of respondents. From 1982 on, WESTEC was a minor source (9%), the YMCA was a source for four households (23%), but the most important source became other farmers, whether neighbours, friends or relatives (41%). This latter figure shows that the villagers were not dependent on the Department of Agriculture alone but were active in obtaining cattle from a variety of sources.

The total number of cattle in the village in 1994 was 95, an average of 4.3 cattle per household. This is much lower than the sample on Upolu, but is closer to the national average of 6 cattle per household (Department of Statistics/Department of Agriculture, 1990:35). However, there was a diversity of herd sizes contributing to that average. The range was from 1 to 16, with a median of only 3. (The national median is also 3 [ibid:35]). Four households had 1 cattle beast and five had 2 cattle. Apart from one herd of 16, the next largest herd had 9 cattle.

Herd size is slightly co-related to number of years farming cattle, with a correlation coefficient of 0.66, as might be expected, but there is also considerable variation. Figure 6.1 shows herd size against number of years farming cattle.

Figure 6.1: Herd Size Related to Number of Years Cattle Farming for Twenty-two Households in Sato'alepai



Source: Fieldwork, 1994.

The Sato'alepai Village Association was one of four groups that had communal herds and were part of the general survey: two village associations and two women's committees. In 1987 two of these groups had no cattle left and by 1994 the other two groups had no cattle left either. Two herds were run down completely but two were split up between the members and formed the basis for starting or supplementing individual herds. None of the four groups had any intention of starting again in the future. The reason was the same as in the case of Sato'alepai: everyone wanted their own cattle. It is the household and not the village which is the unit of production for income in Samoa.

Nevertheless some groups without previous experience do occasionally start cattle farming groups. Kareta, the treasurer at Matai'a's funeral and a pastor of a church in Upolu, told me with great enthusiasm that the youth group at his church was establishing a small herd of cattle. This will undoubtedly give those young people valuable experience with cattle but inevitably the herd will be broken up. If this is recognised and planned for in advance then the benefits of the group will not be lost.

The demise of the village herd and the tensions involved do not mean that farmers no longer co-operate. Rather the opposite may be the case. In Sato'alepai most of the cattle (now

individually owned) are run together on communal land. This is rather unusual. In most villages cattle herds are run separately on family/household land. In Sato'alepai communal grazing is advantageous because many people have only two or three cattle. Each farmer can identify their cattle by sight. Running them together is an advantage when the vets come with a portable stockyard and all the cattle can be "attended to" (drenched). In addition there were only 13 bulls in the village among 22 cattle-owning households. This means that bulls must be and are loaned or shared for mating.

The village cattle showed villagers how useful cattle can be for *fa'alavelave*: "The more cattle you have the more helpful you can be for any *fa'alavelave*". But of course people cannot use village cattle for their own family affairs. This is an important point and explains, in part, the desire for individual ownership. The desire for cattle and the desire to increase cattle numbers in Sato'alepai is closely linked to *fa'alavelave*, most of which are family based, such as funerals, weddings and title conferments. Others, such as church dedications, are community based but as we saw in Chapter 5, these are much less frequent.

One of the original intentions in surveying an entire village was to determine if there was any social or material gaps developing or widening between those with cattle and those without. In 1987, when I had first interviewed here, only 12 households (50%) had cattle so it was not unreasonable to expect to use this village as a case study. However, by 1994 of the 24 households, a surprising 22 households had cattle.

Such is the popularity of cattle that the two remaining households without cattle expressed the desire to have cattle. One such respondent had previously owned up to ten cattle but had slaughtered them all over time for *fa'alavelave*. He had found his herd difficult to manage as he had no fences and although he now desired cattle, the practical managing of a herd put him off starting again. For the other respondent without cattle, cost of buying stock was a barrier. This man had wanted the village herd to be split up among individuals, but this had not happened. Both people felt that it was easier to start a herd if one had relatives with cattle. They both expressed admiration for those with cattle and considered others generous for giving cattle to *fa'alavelave*.

In 1994, 38% of households felt that cattle caused some tension in the village and had an impact on social relations. The primary cause of this friction was the damage to property

caused by escaped cattle. This was a recurring theme and affected all households either directly or indirectly. Nevertheless villagers did co-operate together to recapture escaped cattle. In addition, differential giving of cattle to *fa'avelave* in the village, such as to the funeral of a village *matai*, caused tension. Finally, those with cattle felt that some of those without cattle (or with just one or two cattle) were jealous and had in some cases harmed their cattle. In all, 23% said their cattle had been harmed, 43% had had their fences broken (although this was not always necessarily by people) and 20% said they had had cattle stolen.

These disputes were between neighbours. In addition, disputes could arise within families when "wrong" decisions were made regarding cattle, such as how many were to be contributed to a particular *fa'avelave*. Such disputes are a part of Samoan life however, and cannot be blamed on cattle alone.

Of the households with cattle, 43% felt that cattle had increased the gap between rich and poor families, but 57% did not. It is not clear what distinguished these respondents. Forty-four percent believed other people had a positive attitude of praise towards their cattle, and 16% thought others would like to emulate them and wanted some or more cattle. However, 16% felt others were jealous and 16% felt others were displeased if their cattle escaped and caused damage to property.

Nevertheless villagers still co-operated together with regard to cattle. The main form was co-operative effort to recapture escaped cattle. In addition help was given to "look after cattle" and co-operation in fencing repair and maintenance. There was also considerable co-operation in the finding, slaughter and butchering of cattle for *fa'avelave* for which the efforts of the *taulele'a* were co-opted.

Information and experience regarding cattle farming was not formally shared and was informally acquired during village work and by observation. Information was occasionally shared formally during village council meetings. Occasional training days by the Department of Agriculture's Livestock Division and the vet service which was on call were found useful.

In comparing themselves with other farmers in the village, 46% were conscious that their herd size was smaller than others and 37% were motivated by others' success to increase their herd size. These responses are consistent with the main survey and the custom of observing the success of others with admiration, and the desire by most, if not all, farmers to increase their herd size.

The villagers of Sato'alepai offered a different sample from those in the general survey. They offered the perspective of less experienced farmers with considerably smaller herds than the general survey and who had not necessarily received cattle from the government. They offered an understanding of the widening distribution of cattle in a village over time and the role and success of communal herds. They also functioned as a cross-check on the general survey. No major contradictions were found with the results of the general survey but rather considerable consistency as the same themes and experiences emerged.

6.3 The Social Impact of Cattle

This section considers both the impact of cattle on Samoan society and the impact of Samoan society on the farming of cattle and farmers' experience with cattle. It begins by introducing the respondents in the general survey of cattle farmers of Upolu (and five from Savai'i). Who are the cattle farmers of Samoa? Throughout this study the diversity was noticeable: it included young university graduates, elderly widows, very senior government executives and humble villagers. This diversity has made generalisations very difficult and statistical analysis became meaningless as the unique story of each farmer was revealed.

Nevertheless a range of some of their characteristics can be described. Initially the data are from 1987 and where there is a notable change 1994 data are also used. However, the data from the two surveys are not directly comparable for two reasons. First, the 1994 sample is smaller as not all herds and farmers were traced, due mainly to emigration. Thus the data for 1987 are from a sample of 59 respondents to the questionnaire, and for 1994 are from up to 52 respondents.² Second, the composition of the sample changed slightly, due mainly to changes in ownership which was also due to emigration, or sometimes death, of the owner or other circumstances. (The new owner was interviewed in 1994). Interviewing different people from the one household (which was not always avoidable) may have also altered responses slightly between 1987 and 1994.

Farmers' average age in 1987 was 46 and ranged from 24 to 85. Ninety-one percent of the sample were men, including two village associations, and 9% were women, including two women's committees.

In 1987 73% were *matai* (chiefs) and 27% were untitled (*taulele'a*). By 1994 79% were *matai* and 21% were untitled. The increase was partly due to owners becoming *matai* and partly due to changes in ownership of the herds. The increase due to owners becoming *matai* was much smaller than I expected and contrasts with the widely held view that ownership of cattle confers a greater chance of becoming a *matai*. In Sato'alepai 81% of owners were *matai* and 19% were not and this is consistent with the main survey. Fifty-two percent felt that a *taule'ale'a* who owned cattle had greater prospects of gaining a *matai* title, but 48% felt it would make no difference.

Regarding formal education, 49% of respondents had primary education, 22% had secondary education and 29% had tertiary education. In a very general sense there was a grouping of younger, educated, progressive owners who farmed cattle as a business and to support their immediate family, and another group of older, less well educated traditional owners who farmed cattle for purposes of status. But the former group still wanted to keep their place in the village and the latter group also saw cattle as a way to acquire material goods. In other words, most respondents liked to keep a foot in both camps. In addition, there were many exceptions to these two groupings.

Villagers or 'ordinary people' made up 65% of cattle owners. This group included 12% of owners who were permanently overseas. Thus only 53% of owners were villagers resident in Samoa. Half of those who lived in the villages near their cattle did not consider themselves full-time farmers. While 52% did, most of the others considered themselves retired or semi-retired, while some were shopkeepers or fishermen. Women placed themselves in the part-time category and included two elderly widows. Cattle were considered a retirement investment and activity by many despite the relatively young average age of cattle owners (46 years).

For 35% of cattle owners, farming was not their sole occupation. Thirteen percent were civil servants, such as teachers or extension agents, and 6% were business owners or managers. They included the owners of a bakery business, two car repair workshops and the manager

of a hardware business. Sixteen percent were senior in government, including heads of government departments and a politician. Most of these owners lived and worked in Apia. By 1994 a few had changed occupations: an extension agent had become a pastor, the teacher had changed schools and the politician had become a cabinet minister. But the biggest change was that many more had emigrated, including the hardware store manager.

At the time of the survey in 1987 18% of owners were actually overseas. Of these twelve owners, eight (or 12% of the sample) were living overseas permanently. It is possible some were living overseas when they received DAFF project cattle 18 months to two years earlier. These eight owners had all been villagers or 'ordinary people'. One emigrant had returned, but only to sell his cattle, settle his affairs and move permanently to New Zealand where his children were.

As a result of owners living overseas (12%) or working in Apia (32%) or elsewhere (2%), total absence from the farm in 1987 was 46% and only 29% of owners cared for their cattle personally. In Sato'alepai the care of the cattle was undertaken by the owner himself (27% of respondents), the owner and his children together (36%) and the owner's children (36%). In Sato'alepai members of the extended family were not involved, again consistent with the household being the unit of production. However, in the general survey many of those who lived in Apia had to make use of family members in the village to care for their cattle and thus were obligated through that connection to contribute to *fa'alavelave* as much as anyone else.

Nevertheless ownership clearly resided with a single person or couple and in four cases with two friends who had gone into partnership. The owner was the person who had paid for the cattle. In Sato'alepai the ownership of cattle in the village was attributed to individuals rather than to households by 86% of respondents, 77% said the cattle were owned by the head of the household and 9% by someone else. This would have been either a younger member of the household who had got their cattle from the YMCA (such as Iosefa – see Chapter 5) or an absentee *matai* living with another son or daughter in Apia. In only 14% of cases were the cattle considered to belong to the whole household. This finding is again consistent with the findings of the main survey and with the move towards increasing individualism in Samoan culture (O'Meara, 1987,1995).

In the DAFF project sample in 1987 (n=64), the range of experience prior to receiving project cattle in 1985 or 1986 was not always successful: 22% were first time cattle farmers with no previous experience, 22% had previously had cattle but had run down to nothing and were starting again and 56% had other cattle. The length of time cattle farming ranged from one to thirty-four years and although 50% had less than ten years experience many farmers did have considerable depth of experience.

Success in terms of herd size varied considerably between respondents. By 1994 none of the four groups interviewed in 1987 had any cattle left. In 1987 among 64 respondents the average herd size was 13, median 8 and the range was 0-72 cattle, but eight respondents had no cattle left at that time. In 1994, when I tried to follow up all respondents including those with no cattle, 51 respondents had an average herd size of 25, median 15 and range 0-150, but ten respondents had no cattle left. Cattle farmers range from the very successful to the incompetent. This will be analysed in greater detail in Chapter 7.

The observations above suggest that many variables could contribute to the success or otherwise of a herd. As previously concluded, groups are particularly unsuccessful in the long term although they may have a valuable short term role. Other variables might include age, education and *matai* status of the owner, length of time farming cattle, herd size, absence from the farm, and partnerships. In Chapter 7 some of these variables will be analysed further as they relate to success. But here can be added another: major life events. These include death of the owner, death of the owner's parents or spouse, emigration and change of ownership of the herd (which is often a consequence of a major life event).

Of 52 respondents who had herds in 1987 or started again since then, 23 or 44% suffered a major life event between 1987 and 1994. Ten respondents (19%) emigrated, three (6%) died, and ten (19%) suffered the death of a parent, parents or spouse. 29 (56%) did not suffer a major life event. Adding the emigrants and those who died, 13 (25%) of herds changed ownership in the sense that different people now cared for them.

Of 13 herds where death was the major life event, 11 herds still existed; 7 had increased in size while 4 had decreased. In comparison, of 29 herds where there was no major life event 27 herds still existed; 23 had increased and 4 had decreased. These figures, which are presented in Table 6.3 as percentages, suggest that the death of the owner or someone very

close to the owner does have an impact on herd success. These herds have twice the chance of being totally depleted.

However, the impact of emigration is far more dramatic. Between 1987 and 1994 ten respondents emigrated. This made up 19% of the sample and an average emigration rate of 2.7% per year for seven years, a figure approximately the same as the national figure for emigration. Of the ten cattle herds emigrants left behind or slaughtered to fund their emigration, three still existed but seven did not. An emigration rate of 2.7% per year may seem a low figure but over several years it adds up to one of the most decimating factors impacting on the smallholder cattle sector in Samoa.

Table 6.3: The Impact of Major Life Events on Herds 1987-1994

Major Life Event	Herds with Cattle Left	Herd Size Increase	Herd Size Decrease	No Herd Left
Death	85%	54%	31%	15%
Emigration	30%	20%	10%	70%
No Major Event	93%	79%	14%	7%

Source: Fieldwork, 1987, 1994.

The impact of emigration on cattle herds can be seen in the following two case studies. Tupu is an example of an emigrant. In 1987 he had four cattle and a calf. In late 1987 he emigrated to New Zealand leaving the cattle in the care of his brother-in-law. From New Zealand he sent letters to say what was to be done with them. One bull was to be killed to pay for his wife's airfare so she could join him. Four remained which he gifted: one heifer was given to his brother-in-law, the bull calf was given to a friend, and two cattle were given to his half-sister (whom I interviewed in 1994). One of these escaped and one was slaughtered for money to celebrate her nursing graduation.

Sau and his family emigrated to New Zealand in about 1990. In 1987 he had eleven cattle and numbers had increased since then. However, three of his grandparents had died, which consumed three cattle and two had been used for his father's title conferment in 1989. He killed about six to pay for the airfares to New Zealand for his family of two adults and four children, and to repay his loans. He left the rest in the care of neighbours, in essence

essentially abandoning them, according to his brother Peni who was a teacher working elsewhere. They were neglected and three died in the cyclones, one was exchanged for a horse and one for a gun. By 1991 two remained, one was killed by neighbours after escaping and damaging their taro crop and the last one was claimed by his brother Peni who I interviewed. It was now in calf and cared for by Peni's friend who also had cattle. Peni was very disappointed by his brother who he said had a "bad attitude".

In some cases a smooth transition to new owners is made but more often than not herds do not survive emigration whether they are used to fund it or not, which they usually are. An alternative view, however, is to suggest that emigration, like *fa'alavelave*, promotes and motivates cattle farming. Cattle are farmed for the purpose of funding emigration and cattle are perhaps a half-way step for those looking to create a 'better' future for themselves.

For herds that survive their owner's emigration however, and particularly if the owner is an older *matai*, the influence continues. Instructions may be issued from overseas about what is to happen to the cattle. In some cases the owner had lived overseas for many years. It was striking that an owner could wield power from so far while those left behind were relatively powerless.

Thus far we have been considering the impact of Samoan society on cattle herds. Now the impact of cattle on Samoan society will be considered. Some of these are interrelated. For example while emigration has a large impact on cattle herds, cattle have enabled many people to emigrate, and, to an extent less than expected, remittances from emigrants are sometimes used to buy cattle.

Cattle are popular among farmers because they find cattle very versatile, useful and profitable, enabling them to fulfil both traditional and modern requirements, goals and ambitions. Not only can they be used for *fa'alavelave* but also to fund modern goods such as TVs, videos, fridges, vehicles, new roofs, school fees and airfares. They can be used to stock a shop or buy an outboard motor; whatever is required cattle can be 'useful'. Most farmers were in agreement that cattle had gone beyond their expectations and many were quite surprised and delighted with what cattle had enabled them to achieve financially. The usefulness of cattle has been further demonstrated after the two cyclones and the taro blight,

during which they showed their dependability and ability to avert financial ruin and fund recovery.

Respondents referred to these activities (both traditional and modern) as "supporting the family" (*fesoasoani i le aiga*), a rather vague but widely used term they also used to describe the purpose of their cattle farming, why they started and why they continued. It covers both traditional and modern concepts of family provision and security. While cattle are used for income, they are not usually used to provide regular steady income (this is not why they are farmed) but rather are more often used for larger irregular items. In this way they provide security against unexpected events or large demands on family resources.

Farmers give cattle many roles. One of these is to use cattle as a form of savings, that is as a walking bank, to be cashed in when needed. Farmers were not really able to tell me why they did this except that it was convenient. Although many people have bank accounts they are not sophisticated bank customers and tend to think of money as something they will spend rather than save and reinvest. Banks are too far away for many. They also think they will get a better return from cattle which 'keep growing'. Live cattle can be used for a multiple of purposes, from *fa'alavelave* to being sold to fund a new pick-up vehicle at very short notice. This is practical but it also follows from the general belief that life is something that happens to you and control is being prepared and able to cope with any event that occurs. The frequent and yet random nature of *fa'alavelave* perpetuate this with regard to cattle.

Any study of social impact seeks to determine the impact of a new technology on social relations, and particularly whether social gaps have widened. Obviously there are many rural families in Samoa who do not have cattle. While those who did have cattle felt social gaps had not been created or widened, surprisingly those I spoke to who did not have cattle also agreed. Those who did not have cattle admired those who did and spoke of how they were encouraged or inspired to try to get cattle themselves; what I might term the 'admiration effect'.

Samoans watch their neighbours very closely but use what they see as "encouragement". While they may feel some jealousy at times, the response is not usually one of cutting down the tall poppy (with some exceptions) but a desire to emulate what they see. Those without

cattle tend to admire and praise those that do have cattle. One respondent in the general survey claimed that having cattle attracted more people to shop at their little shop, perhaps in the hope that some of the status would rub off by association. Another aspect where Samoan culture impacts on cattle farming is in the use of connections, charm, persuasion and obligation to gain access to cattle or to buy cattle at a lower price.

In the face of denials of negative social interruption I do not have hard evidence to the contrary. There is no outright evidence of preferential access to cattle apart from the financial ability to pay for them. DAFF were very fair: anyone could go on their waiting list if they met minimum requirements. Furthermore, the distribution of cattle is becoming wider all the time, as was shown in Sato'alepai. Where once there was dependence on DAFF to supply cattle, buying and selling between neighbours, friends and family members is increasing. Another ameliorating aspect is that even if not everyone has cattle, at least they receive and eat beef quite often, whether from *fa'alavelave* or fines. In general, wider community support, knowledge and acceptance has developed over time.

There were, however, two contradictions to this happy picture. First, some farmers reported of jealousy which led to their fences being broken, cattle being allowed to escape, stealing, or their cattle being slashed with bush knives. This is a reflection of the social requirement for outward harmony which may mask inner anger and resentment, and of the separation of public and private behaviours which was examined in Chapter 4. Behaviour towards cattle (both positive and negative) can be explained in terms of behaviour common in Samoan culture, it is not behaviour unique in relation to cattle. Stealing, however, is a function of the popularity of cattle rather than resistance or lack of social acceptance. (Stealing is stealing of meat rather than live animals. A beast is shot, butchered and the meat taken, leaving only the head, skin and guts. The skin might also be taken).

Second, escaped cattle did sometimes lead to extreme tensions between neighbours, especially if they damaged crops. Neighbours sometimes resorted to shooting escaped cattle but usually returned the carcass. On the other hand a new etiquette was emerging regarding escaped cattle, whereby a neighbour advised the owner if a beast had escaped and help was given to retrieve it. This worked better if the neighbour was also a cattle farmer (which is becoming more common) so the relationship did not become one sided. The practice of daily counting also meant that a problem was able to be rectified fairly quickly before too much

damage was done or upset caused. This was also hastened by the knowledge that the neighbour did have the right to shoot an offending animal if necessary.

Again any social impact analysis must examine the impact on workloads, and especially the impact on women's workloads. Apart from fencing, cattle did not require a great deal of work, or at least this was the perception. Daily checking by children, the owner's workers or wife, or the owner himself was about all that was necessary. While some had to carry water, many had laid a water pipe with a tap on the end. Cattle reduced the workload in other areas: they made it easier to find and collect coconuts and some farmers were able reduce the effort they put into other crops because of the profit they made from cattle. After the taro blight some farmers turned their taro plots into grazing land for cattle.

Although cattle are an immediate family activity, within the family it is often the *matai* who is the owner but untitled men and children do the work. As we saw only 29% of owners cared for their cattle personally. Thus the owner might attend a workshop but the recommendations are not implemented because he never goes to the plantation. If on the other hand workers attend a workshop, recommendations may not be implemented unless incentives and benefits go to the worker. However, at a workshop I attended a mixture of owners, managers and workers were present, including one owner's daughter. I do not mean to suggest such frustration between owners and workers is common or a major obstacle. Many owners do look after their cattle themselves and many others are fair and reasonable. Once again the variations between farmers mean that generalisations cannot be made.

Women who had their own cattle considered it a part-time activity relative to their other activities. The greatest problem for women was their fear of wild cattle. They were also particularly upset if a calf was born dead or died. But in accordance with Samoan culture the greatest conflict regarding workload was inter-generational, especially where the owner was absent. While adult children did the work they often saw their parents gaining the benefits, a source of considerable tension.

While I am not able to conclude that cattle have a large impact on Samoan society in that they are not changing Samoan society, they do reflect Samoan society and changes that are occurring in it. They also facilitate change because they widen choices and increase opportunity and they suit the changes Samoans want to make.

Conversely, there are many ways, in addition to *fa'alavelave*, in which Samoans organise their lives that impact on how cattle are farmed in Samoa. First is that cattle form only one part of a larger income generating strategy. As we have seen many respondents worked at off-farm occupations or businesses (teachers, a baker, mechanics, government officials, fishermen, businessmen), all had other crops and (except for Seventh Day Adventists) pigs. Many were absent altogether from the farm. It means, however, that their attention is often distracted from cattle by their other income-generating activities and commitments, whether economic or social. In fact one reason farmers like cattle is because they do not require constant attention or effort. This, however, is likely to cause frustration to technical advisors wishing to get farmers to pay attention to the finer points of pasture management or other technical details. But it fits in nicely with another aspect of the Samoan social system: the owner who is away is able to delegate the care of cattle to a person lower in the social order or family member left on the farm. Using relatives to care for cattle instead of having to pay workers is cost efficient.

It does however, sometimes lead to frustration and feelings of being used by those who do the work with little or no reward. This particularly occurs, for example, if the owner is an elderly *matai* who has gone to live with children in Apia, leaving children in the village to care for the cattle. Extreme frustration arises when he simply issues a command from Apia that so many cattle are to be contributed to a certain *fa'alavelave*. One daughter-in-law, under normal circumstances unable to express her frustration, confided this to me with considerable feeling. However, some owners in Apia expressed their frustration that family members sometimes made unreliable workers and the relationship created obligatory claims on the cattle in time of the workers' need. Usually, however, this was recognised to be fair.

What is overriding here is the traditional *pule* or authority of the owner in the case of *matai*. That *pule* remains over long distances, even as far away as New Zealand where some cattle 'owners' resided. Ownership of cattle was vested in a single person (or sometimes a husband and wife) which might seem surprising in the context of Samoan culture, but this was the case. In one case, an owner who had died was still considered the owner. Cattle owners who were not *matai* took on some of this aspect of being a *matai*, that is, having *pule*. Except where an owner was instructed by a more senior figure, the owner had sole authority over his or her cattle. The owner was also very clearly the person who had paid for the cattle, which perhaps explains why so many off-farm income earners were cattle 'owners'.

The high level of emigration of Samoans has a major impact on cattle farming. Cattle reflect the usually unrecognised devastation that is left behind when the emigrants just up and leave. To an extent they also illustrate the turmoil in the lives of Samoans when they are faced with death or a major life event, and inter-generational frustrations. But cattle offer many advantages to Samoans, both traditional and modern..

6.4 Cattle, Land Tenure and Social Change

Cattle, as well as reflecting Samoan society, also allow the expression of social changes that are already occurring. These include the trend towards individualism and the desire to acquire material goods. The ownership of cattle is clearly by individuals and their benefits are mainly kept within nuclear or immediate families.

Cattle also reflect the very active interaction between urban-based and rural-based family members. On one hand, when urban-generated money is used to fund the purchase of cattle, it is in a sense invested in rural Samoa with the expectation of a return on that investment whether social or financial. Urban-based owners benefit from traditional family-based labour relations. On the other hand, cattle enable villagers to access urban money thereby subsidising the village lifestyle. Rural caretakers have moral access to cattle funded from town. Also, in *fa'alavelave*, as we saw earlier, urban and overseas contributors do not receive back as much as they contribute to the exchange.

In Samoa the traditional and the modern are not mutually exclusive and are constantly interacting and being negotiated. *Fa'alavelave* are providing a market for cattle, villagers seek material goods while urban-based Samoans use cattle to keep their investment in the village.

Changes in Samoan society, particularly in land tenure, have facilitated the adoption of cattle farming. There are a number of parallels and linkages that can be found when changes in land tenure and the findings of this research regarding cattle are compared. First, both are closely linked with increasing individualism and the focus on immediate or even nuclear families.

"individuals have replaced corporate *'aiga* as the primary landowning units, nuclear family households have replaced multi-household extended families as the primary socio-economic units, and economic individualism has largely replaced the 'communistic system' of Old Samoa" (O'Meara, 1995:122)

O'Meara (1995) identified two distinct changes that have been occurring throughout the twentieth century that have weakened the traditional communal system: changes in land tenure and the splitting of *matai* titles. Both of these have allowed individual ownership of land and the individualisation of livelihoods and lives, to the extent, he argues, that the old system is endangered:

"individual or national progress is now eating at the roots of Samoa's 'communistic system'; Samoans now worry less that the Samoan system will make economic individualism impossible, and more that their economic individualism will make the Samoan system impossible" (O'Meara, 1995:110)

Cattle are individually owned and most are grazed on individually 'owned' land. While not causing changes towards individualism (cattle are too recent an introduction) they are ideally suited for facilitating and consolidating the changes towards increasing self-reliance and independence.

A second linkage is that cattle allow land to be claimed as individually owned land without having to be intensively cultivated. "The chain saw, a fence and a few cattle make establishment of almost permanent tenure possible at relatively low cost" (Ward, 1995:87). The relative ease of doing this may motivate additional land clearance. But it remains unclear whether land is cleared to allow individual ownership of cattle or cattle are farmed to claim individual ownership of land. Either way, both are done with the same ultimate objective: present and future security of income and livelihood for individual families.

Observers have been concerned at the effect of the desire for, and ease of, obtaining individually owned land on the forest cover of Samoa (Ward, 1995). While 'new tenure' is established by clearing forest inland, land under 'old tenure' nearer the coast is neglected (Ward, 1995:87). There was a concern among environmentalists that Samoan culture would be unable to cope with converting closer land under 'old tenure' to the new system, thereby

rejuvenating it and relieving pressure on inland forests (Kobayashi, 1997). However, it now appears this fear may be overstated (*ibid*). O'Meara has recently identified a third category of land: "changed to new tenure" (O'Meara, 1995:138) whereby once communal lands are becoming individually 'owned'. Ingenious twists of logic are often used by villagers to justify the changes in traditional terms (*ibid*:129). Again this demonstrates the flexibility of Samoan culture in bringing about change.

Third, modern changes are justified as traditional. While cattle have been incorporated into *fa'alavelave*, the individualism of land is justified using traditional concepts of *pule* and the ownership of land by *matai* titles, even if in the process of justification the finer points have been deliberately ignored (O'Meara, 1987,1995).

A fourth parallel is the involvement of urban Samoans with cattle farming which this research has revealed. Ward (1995) identified the same pattern with regard to land tenure whereby

"many urban dwellers and public servants ... seek to ensure control of land for their families in the villages of their '*aiga*'" (Ward, 1995:88)

The use of cattle is undoubtedly related to this because of their utility for this purpose by absent owners.

Fifth, there is now no significant difference between titled and untitled owners. Although most cattle owners are *matai*, simply because most men are *matai*, this research found no significant difference between titled and untitled cattle owners. They had the same *pule* over their own cattle (both titled and untitled owners would defer or not defer to a more senior member of the family regarding contributions to *fa'alavelave* to the same extent), they showed the same variety of success and had the same access to resources. Likewise, with regard to land ownership and titles, change has been rapid. In a ten year period it has become recognised that untitled people can and should have *pule* over individually owned land (O'Meara,1995:133). It appears that any claims that a *matai* title has or gives economic advantage or authority, are now extinguished.



Plates 43. A cattle farmer (survey respondent).



Plate 44. A cattle farmer beside his parents' graves. He contributed several cattle to each funeral.



Plate 45. The owner of this abandoned dairy equipment had emigrated to New Zealand. His cattle could not be traced.



Plate 46. As with crops, farmers sometimes stay in *fales* deep in the plantations to prevent stealing.



Plate 47. Cyclone damage to a banana crop.



Plate 48. Cattle and pigs are farmed differently.



Plate 49. Cattle grazed under coconuts.



Plate 50. Fallen coconuts are easier to find and collect if cattle are grazed beneath the coconut trees.



Plate 51. Cattle grazed on land cleared from the bush. Here an extension officer visits a cattle farmer.



Plate 52. A pure-bred Brahman bull. This breed can be very 'stropy' in temperament.



Plate 53. Brafords (Brahman-Hereford cross). Droopy ears indicate Zebu blood, necessary for adaptation to hot, humid climates.



Plate 54. A Droughtmaster bull is shown in the centre of this plate.



Plates 55 and 56. These two neighbouring cattle farms had weeds and ideal pasture growing side by side in identical conditions.



Plate 57. Stockyards have seemingly sprung up everywhere and make the statement that the owner is serious about cattle farming.



Plate 58. Farmer initiative: using expensive cartoned milk and a baby's bottle to rear a calf rejected by its mother.

Are these changes modernisation? O'Meara argues that they are not imposed from outside but are endogenous in origin and thus, while displaying some of its characteristics, are not modernisation:

"Samoans and outside observers tend to think of changes such as the individualisation of land tenure as processes of 'Westernisation' ... [However,] Samoans are adopting individual land tenure not because they want to be like *palagi* (ambivalence of attraction and repulsion being nearly equally balanced), but because they share the same human nature, increasingly live in similar circumstances and face similar obstacles and opportunities with similar information and resources, and have recently come to accept some similar beliefs, values, and goals in addition to those they already shared" (O'Meara, 1995:140-141)

The circumstances in which Samoans live have changed dramatically during the past century. Warfare has ended. Infant mortality has dropped dramatically resulting in much larger nuclear and immediate families. The cash economy has been entered, by both cash cropping and off-farm work, and labour saving technologies adopted. The authority of the state has been established and emigration has altered social and economic relationships (O'Meara, 1995). These and other changes have meant that Samoans found the old system no longer adequately met their needs and slowly adapted it to suit their new circumstances.

Cattle have facilitated changes in land tenure and changes in land tenure have facilitated cattle farming, but, more importantly, both reflect greater changes occurring in Samoan society. The land tenure system is part of the farming system and the place of cattle in the Samoan farming system is discussed next.

6.5 Cattle in the Samoan Farming System

Cattle are a new technology in Samoa. The experience farmers have had with cattle includes a number of technical issues which are discussed in section 6.6. In order to place these in context, however, the farming system and the incorporation of cattle into the farming system must be introduced. While in earlier years the Samoan village/smallholder farming system

was characterised as inefficient (Ward and Proctor, 1980: Sevele, 1980,1983), in recent years it has been viewed more favourably:

"Undoubtedly Western Samoa's strongest asset is the productivity and efficiency of its traditional farming system" (World Bank, 1991:37)

The World Bank's Agricultural Sector Strategy Review of Western Samoa (1991) recommended that the farming system be supported, its importance to the whole economy be recognised and the contribution of subsistence production not be underestimated. It recommended that research and extension be redirected towards a farming systems approach, that new commodities or technologies be compatible with the farming system and that the sustainability of the system be ensured (World Bank, 1991:37).

It concluded "many of the oft-quoted constraints to development - the Samoan "way of life" ... are not the most critical factors" (World Bank, 1991:32). Like O'Meara and Ronnås, the World Bank concluded that the most important determinant is the profitability of farming, and in particular the return to family labour. Thus in the 1990s we see the emergence of an anti-thesis.

In its Seventh Development Plan the Government called for revitalisation of the primary sector, acknowledging that:

"In most respects the traditional system of agriculture, for both commercial and subsistence production, is basically sound ... a generally successful agricultural system, whose whole is more valuable than the sum of its parts" (Government of Western Samoa, 1992:56,57)

It also stated that:

"there will be a marked shift of emphasis away from new projects in favour of maintaining what is already in place and making more effective use of it" (Government of Western Samoa, 1992:i-ii)

The Samoan agricultural system is described by the World Bank as "unusual" (World Bank, 1991:50). The 1989 Census of Agriculture found that 70% of households (or 10,884 households) in Samoa are agriculturally active. The average holding size was 15 acres, comprising on average 3 parcels per holding. 77% of this land was under crops (Department of Statistics/ Department of Agriculture, 1990:25). The farming system is an integrated 'multi-storeyed' system both metaphorically and literally, in that it is a spatial system of agroforestry with tree crops (coconuts with a lower story of bananas and cocoa) over taro and other root and vegetable crops, together with chickens, pigs and cattle.

In addition to crops and livestock, 59% of agricultural households also engage in fishing (Department of Statistics/ Department of Agriculture, 1990:26). But having livestock is not restricted to agriculturally active households: 91% of all households kept livestock (ibid:25). This tactic of having multiple sources of support and income is found throughout the Third World, serving to reduce risk and increase security (Porter et al., 1991).

The farmer also supplies several markets: the subsistence market (his or her own immediate family needs), the cultural market (*fa'alavelave*), the domestic market (markets and butchers) and the export market. Many crops and products can be used or sold on several of these markets. The Agricultural Census found that 26.4% of agriculturally active households produced for home (and cultural) consumption only and 7.3% produced primarily for local or export markets, but that the majority (66.4%) produced for themselves and also sold some crops or surplus crops. In total, then, 73.7% of agricultural households sell at least part of their production.

Several crops have traditional and multiple uses so that they continue to be produced even when uneconomic in other markets. Coconuts are the best example. 'Green' coconuts are used for drinking (there is also a market for these for tourists and visitors), ripe coconuts are used for making coconut cream for household consumption (it is consumed with most meals and an important ingredient in traditional foods such as *palusami*), for feeding pigs as well as being dried for sale as *copra*. The leaves are used to make thatch, blinds and baskets. The timber is used for building and fences and the empty shells can be used to make charcoal.

It is these uses that explain why coconuts, together with cocoa and taro, continue to be produced, albeit in smaller quantities, when export prices are low and the return to labour is

very low as it is for coconuts relative to other products (World Bank, 1991). Thus the subsistence sector and the commercial sector are so inter-linked that "it is doubtful whether there is a significant subsistence sector in Western Samoa" (World Bank, 1991:2). That is, most households participate in both markets concurrently. The 1989 Census of Agriculture found that 73% of households produced for both home consumption and for sale (Department of Statistics/ Department of Agriculture, 1990:28). While the Agricultural Census does not give the average number of different crops or agricultural activities per household, it is clear that farmers engage in several activities concurrently: 96% of households grow coconut (48% for sale), 93% grow taro (38% for sale), 89% grow cocoa (29% for sale), 95% grow bananas (13% for sale) 91% grow *taamu* (21% for sale). Farmers also grow breadfruit, kava, yams, papaya and mangos (ibid:48,49).

Off-farm income further reduces the application of the term 'subsistence farmer'. Many 'farmers' are full-time waged or salaried workers. In the sample of cattle farmers in this research 35% were civil servants or businessmen. The 1989 Census of Agriculture found that only 6% of agriculturally active households derive all of their income from agricultural activities. The rest, 94%, obtained at least some income from other sources, often the major portion of their income (ibid:40).

Samoa farmers have wide interests and are highly literate. As a result of emigration and family members living overseas many have travelled and been exposed to Western ideas. As well as receiving a good education in Samoa, some have been educated overseas.

"Farmers are generally better educated than in most developing countries, often to high school or even university levels ... the good education and mobility ... has also encouraged entrepreneurship and facilitated the development of farmers as marketers, exporters and processors. Farmers frequently have links with several countries through relatives and other Western Samoans and have a world view unusual in farmers and entrepreneurs in countries at similar levels of income" (World Bank, 1991:19)

In addition to participating in both subsistence and commercial markets, farmers also produce the same products for both markets. Thus Samoan farmers, because they know how to produce their (subsistence) product so well, find producing for the commercial market

both easy and convenient. And it was Samoans themselves who inadvertently created this market in the case of taro: Samoan emigrants are the consumers of exported Samoan taro so the requirements of the market are understood.

Within Samoa it is the same for cattle as Samoans have created their own 'traditional' market for beef. It is no surprise that cattle have taken on multiple roles and markets. This feature, whereby production, consumption and marketing are so integrated in Samoa, is a real bonus in comparison to the situation faced by other Third World farmers who produce one product for their own consumption and another (alien) product for the commercial market.

Samoan farmers have also shown that they will respond to higher prices and are willing to adopt new technologies:

"A ... feature of the Western Samoan farming system is that new crops have been grafted into it very readily and farmers show particular aptitude at developing production technologies suitable for each crop. They are also very willing to try new crops and show degrees of risk taking uncommon in farmers at this stage of development" (World Bank, 1991:2)

This is a remarkable statement when compared to the descriptions of Samoan farmers made just one decade earlier and outlined in Chapter 3. It is also remarkable in the face of the experience of severe price fluctuations in export markets and problems with disease and cyclones that have been experienced by farmers in recent decades. Samoan farmers have learned over many decades that the export market is extremely fickle.

Bananas were a very profitable export crop to New Zealand in the 1950s and 1960s, reaching a peak of over one million cartons in 1958. However, in 1967 Black Leaf Streak Disease arrived and decimated the industry. Together with another disease, 'Bunchy-Top' disease, the export of bananas was virtually eliminated and the industry has never recovered (World Bank, 1991:11) although some exports have begun again in the late 1990s.

Passionfruit were introduced to farmers by DAFF in 1977. Production expanded rapidly from 35 tons in 1978 to over 3,000 tons in 1984 leading to a price crash as the domestic market flooded and the processors were unable to penetrate export markets fast enough.

Although passionfruit has now reached a smaller more stable level, in the mid-eighties many farmers were severely burned and vines were abandoned to rot on their expensive wooden frames, something I observed when I first arrived in Samoa in 1984.

Then came two cyclones within two years. The first, Cyclone Ofa hit in February 1990 and the second, Cyclone Val hit in December 1991. As well as the devastation to crops and infrastructure, the psychological impact was even worse when the second cyclone destroyed all the repairs and replanting after the first cyclone and led to a state of 'cyclone phobia' (Dominion, 20/4/94).

In the late eighties taro began to boom as export markets to expatriate Samoans were exploited. After the two cyclones, farmers suffering from 'cyclone phobia' planted taro because they knew that taro could survive cyclones (compared to bananas or cocoa) and taro reached 63% of exports (Dominion, 20/4/94). However, in mid 1993 taro leaf blight (*Phytophora colocasiae*) reached Samoa, apparently by wind, and despite the best efforts of DAFF, had spread throughout both islands in a matter of weeks. The results were devastating: 90-95% of the taro crop was destroyed within six months (Trevor Clark, pers. comm., 1994). The loss of taro as a crop continues to have severe implications for subsistence living and self-reliance. In particular the diet has shifted to include imported white rice and white flour as staple foods (Sio, 1996:7).

Pests and diseases threaten not only production but access of products onto the export market. It is quite remarkable in the face of such disasters that Samoan farmers keep going, picking up the pieces and starting again.

However, cattle, apart from the impact of brucellosis, have been largely immune to both fluctuating prices and natural disasters. Although some cattle, especially calves, died or were lost in the cyclones, the impact was only temporary and most herds were largely unscathed. Once again the 'usefulness' of cattle was shown as farmers used cattle to fund their recovery from the cyclones. And as a result of the taro blight (which is of course ongoing) several farmers were not replanting taro but converting that land to cattle grazing.

Not all cattle are grazed under coconuts. In 1987 51% of respondents grazed cattle under coconuts only, (and one third of these had established 'pasture' under their coconuts), 29%

grazed their cattle both under coconuts and in cleared bush, 10% grazed cattle in cleared bush and 10% on long established open pasture. The clearing of bush to graze cattle is intimately related to changes in land tenure that have been documented by O'Meara (1987, 1995) and Ward (1995) and has been discussed previously, but these data indicate that cattle alone are probably not a major cause of deforestation, although 40% of respondents grazed at least some of their cattle on cleared bush. Further research would be necessary to clarify the extent of deforestation caused directly by cattle farming.

While it may be said of the Samoan farming system that "cultivation methods and varieties selected are both appropriate to local conditions and highly productive, requiring relatively low levels of labour input and few cash inputs" (World Bank, 1991:2), Samoan farmers do work very hard. Much of this is unseen by expatriates because it begins at five o'clock in the morning when the temperature is cooler. It is also deep in plantations out of sight.

The Samoan farming system, unlike cereal-based systems, does not have great seasonal variations in labour requirements and the timing of planting and harvesting is not critical. Coconuts fruit all year and taro can be planted at any time, although farmers have preferences regarding working conditions in the wet and dry seasons. Thus the farming household is more easily able to utilise and organise its own labour, and cattle, which do not have precise timing requirements either, fit well into this system.

Nevertheless farmers do hire limited amounts of outside labour. The 1989 Census of Agriculture found that while 17,308 workers in a given month were unpaid (including household and family members), 1,553 were paid (Department of Statistics/ Department of Agriculture, 1990:107,112). That is, only 8% of agricultural workers are paid (although 'unpaid' workers may receive gifts). The cost of this labour is argued to be relatively high due to the inflow of remittances and foreign aid, and factors which raise the opportunity cost of labour (World Bank, 1991).

With relatively high returns from crops such as taro and relatively easy access to land, workers would rather farm their own land than work someone else's. The World Bank calculated that a typical small mixed farm could return \$15 per day for each labour unit. On the other hand the returns to coconut at \$2-\$9 per day are below the prevailing wage rate of \$10-\$12 per day, making it unprofitable to hire labour. The World Bank concluded that "the

high cost of labour acts as a severe constraint on agricultural development in Western Samoa" (World Bank, 1991:29).

It is into this farming system, then, that cattle must fit. As has been pointed out, they do this rather well, especially under coconuts. They do not displace any particular crop or activity. The only major modifications that must be made are fencing and watering. Cattle have a number of advantages, not least that they are not labour intensive (although fencing is labour intensive) and can be looked after easily using only already available household labour, and they provide a high return to labour estimated by the World Bank to be \$24 per day (ibid:30). But perhaps as important is the fact that they are multi-purpose, being able to fill several roles concurrently, particularly those of cultural exchange item, income earner, bank, and supplier of social prestige.

It may be that cattle fit into the Samoan farming system too easily and problems are not easily recognised. Although it is possible to grow very good nutritious pasture in Samoa it is also possible to leave cattle to eat undergrowth which is of poor nutritional value but this is not recognised by farmers. A secondary consequence is that weeds such as mintweed (*Hyptis capitata*) can quickly emerge and are becoming a problem (AIDAB, 1987:51).

It is often reported that most cattle are tethered (e.g. Lincoln International, 1991b:9). This is not the case. Most cattle are kept fenced in plantations behind the village where they are not as visible as those that are tethered by the roadside. Families with only one or two cattle may tether them but only two respondents in this research did in 1987, and it seems to be much less practised now.

Cattle are not farmed as pigs. Cattle are kept fenced in the plantations, while pigs roam free and closer to houses. Pigs are fed daily, usually with coconut (scraped out of the shell). This is fairly labour intensive but pigs grow much faster and give a return after only about nine months. Cattle need only water daily, whether from a stream, piped with a tap into a trough or carried to a trough. In addition, many farmers or their children 'check' and count their cattle daily.

As farmers have incorporated cattle into their farming system they have encountered a number of technical issues. These are discussed next.

6.6 Technical Issues and Farmer Innovation

In this section technical issues involved in farming cattle in Samoa from the farmers' perspective and experience, as they relate to social aspects, are examined. Technical aspects are not approached from the perspective or knowledge of an agricultural scientist or consultant. Rather the objective here is to examine farmers' adoption of technical behaviours and their initiatives, progressive change as well as the problems they face. It is to determine whether they are technologically adoptive or adaptive; passive or active.

The following discussion uses information from Payne, 1970, Smith, 1976, Stunzner, 1976, Leavasa, 1982, Copland, 1985, Holmes, 1985, Schottler, 1985, Hill, 1988, Pattie, 1988, Maule, 1990, and various AIDAB publications, as well as discussions with technical personnel in Samoa in 1994, but is primarily based on discussions with farmers. However, the reader is referred to these publications for greater depth of analysis of technical issues.

Some of the ways in which Samoan farmers farm and use their cattle have technical implications. The technical consequence of the use of cattle as walking banks, for example, is that cattle are not cashed in and replaced when maximum weights are reached, as happens in 'modern' farms where maximising productivity and profit are the goals. The Samoan practice, in contrast, lowers productivity as cattle which have reached maximum weight do not 'keep growing' but do continue to consume pasture for no gain.

In contrast, the emphasis in cattle projects, based on Western models, has long been on increasing productivity, both worldwide (AIDAB, 1989:v) and in Samoa (Jaap Meijer, pers. comm., 1994). This is undoubtedly because tropical cattle are less productive than temperate cattle (Smith, 1976; Maule, 1990) and because the world market for beef is growing (Hill, 1988). The Western view is one of puzzlement at "the apparent contradiction between socio-economic importance and low productivity" (AIDAB, 1989:v). In other words, if cattle are so important culturally, why have efforts to improve productivity, which have "been the basis for considerable development assistance from many donors over the past thirty years ... met with only limited success [?]" (ibid, 1989:v).

This research has found that Samoan farmers, on the other hand, are not concerned with productivity per animal but with the number of animals because both status and generosity,

and therefore prestige, is measured in terms of quantity rather than quality. The competitive nature of Samoan society means farmers are aware of whether their neighbours have more or less cattle than them and, to a certain extent, a subtle competition based on herd size is developing. This has a restraining influence on the opposing competition to be seen to give generously to *fa'alavelave*. If it is not the priority or practice of Samoan farmers, any emphasis in aid projects on increasing productivity per animal may be misplaced at this time.

In 1987 as a result of the first survey, I became particularly concerned about the breed of cattle that had been chosen for importation and distribution to farmers (Maiava, 1993). This issue had been raised for technical reasons, by Quartermain (1980):

"The choice of suitable breeds for the beef industries of the (Developing Member Countries) is a matter of debate and controversy. The types of cattle established in the Pacific Islands have generally been determined more by availability, quarantine requirements and personal whim than by any systematic search for the most appropriate types. An exception to this has been the ... introduction of Brahman cattle" (Quartermain, 1980:277)

In earlier years, Hereford and other cross breeds adapted to temperate climates were brought in from New Zealand. The national herd had become Hereford or Hereford-Poly cross. Samoan farmers refer to these cattle as *povi Samoa*. They suffered eye infections and eye cancers as a result of the humidity as well as tick infestation, internal parasites and low fertility (Stunzner, 1976; Leavasa, 1982). Beginning in 1977, pure bred Brahman bulls were brought in from Queensland to produce a Braford national herd (Hereford-Brahman cross).

While the haphazard approach to appropriate breeds happened in Samoa as Quartermain described, it is debatable whether Brahman were any more appropriate to the needs of Samoan cattle farmers than earlier cattle breeds even though they are much better adapted to the climatic and forage conditions. This was because of their tendency to be wild. The Brahman breed or cross-breed is particularly prone to becoming wild if left alone or roughly handled. Regarding Brahmans, a guide to cattle breeds states:

"When treated firmly the animals can be docile, but if not so treated can be like the fractious Brahman bulls used in rodeos" (Felius, 1985:184)

In 1987, 22% of respondents volunteered in an open question that wild cattle were a major problem, a figure that I believed would have been even higher if I had asked it directly in a closed question. It ranked, from their perspective, as their second most major problem after the cost, construction and maintenance of fencing.

"The problems arising from this single factor were illustrated in a case study of the Mulivai Women's Committee who were given money by UNDP to buy milking cows. However, no milking cows were available so they purchased three Brahman heifers and one bull from the Livestock Section of DAFF (or they would have to give the money back). The bull was wild and actually injured people. In separate incidents the bull and an equally wild heifer escaped and were shot by neighbours. The carcasses were returned and the women sold them. The women were very afraid of their two remaining heifers and wanted to get rid of them" (Maiava, 1993:254)

A factor in the problem was that cattle were arriving wild from the government farms where they had been poorly managed. From my observations in 1987 I concluded:

"Both DAFF staff and farmers hold two misconceptions about cattle. First cattle can look after themselves: just leave them in a paddock and come back when they are fat. Second, cattle are wild and dangerous and as a result they need to be treated roughly to be controlled. Both practices only lead to cattle becoming wild which encourages further mismanagement, creating a vicious cycle" (Maiava,1993:254)³

Wildness is a problem for many reasons. When wild, for example, heifers are more liable to injury during calving. Wild cattle damage fences and escape, a major problem identified by farmers. Escaped cattle are often shot, or abandoned and then stolen because villagers are unable to recapture them. Uncontrollable cattle mean that any management practices recommended by DAFF such as rotational grazing are unlikely to be practised. It also means cattle cannot be reloaded live onto a truck. In 1987 I concluded:

"The only way cattle ever leave a farm is dead. As a result there is no internal market for live cattle, no exchange between farmers and no way for farmers to cash in their investment in times of necessity without killing them" (Maiava, 1993:255)

But farmers have begun to get around this too as a result of the desire to buy and sell between themselves. They have found that they can 'tackle' young animals, tie their front and back legs together and man-handle them onto the back of a pick-up truck or use a rope to hoist them up. But they can only do this for young animals. For most farmers who do not have access to trucks large animals can still only be transported dead whether sold to the butcher or for *fa'alavelave*. This is despite the building of cattle yards which are used primarily to receive DAFF cattle. Ideally DAFF trucks, which are few in number and prone to breakdowns could be hired out but limited transport still remains a constraint to most farmers. Exchanges between neighbours do occur however, especially to avoid killing heifers for *fa'alavelave*.

It is quite rare to find that someone has actually talked with smallholders and taken their views into consideration but Pattie has done so. On the issue of breed he recorded:

"During interviews with smallholders who had received cattle in the distribution program, the opinion was expressed that they found that the Brahmans were hard to control and frequently broke through the existing fencing ... so it is recommended that inherently quieter animals derived from *Bos indicus* crosses be chosen ... Smallholders are anxious to obtain cattle of any type with a general preference for quieter animals" (Pattie, 1988:20)⁴

I was rather surprised then, to return in 1994 and find that the problem was no longer as serious in farmers' eyes. They had in fact dealt with it in several ways sometimes accidentally but to a large extent by working out how to reduce wildness based on their observations of cattle behaviour.

The first way was to kill wild cattle. Any animals that were particularly wild were chosen for the next *fa'alavelave* (this was seven years later, after government restrictions on killing project cattle had expired). This had happened to such an extent that 18% of respondents no

longer claimed to own Brahman or Braford cattle, despite all of them having received at least one pure bred Brahman bull and either Brahman or Braford heifers eight to nine years earlier. Of course farmers had killed all these original stock by now, but those farmers had also systematically reduced the Brahman genetic content in their herd over about two generations to the point where Brahman features could no longer be distinguished. This could have been done by deliberately cross-breeding but as farmers do not manage mating this was most probably done by selective culling. Many farmers did not have enough other stock to cross breed with for this to happen so quickly.

The second method was to tame the cattle. In 1987 only two farmers had managed to tame their Brahman cattle; one by mixing them with older tame stock and another by putting them in a stockyard and stroking them every day for two months. Many more farmers were very frightened of their cattle. However, by 1994 several more farmers had tamed their stock. The most common methods were spending more time with their cattle and using water. The first was something of an accidental discovery and is related to the problems of stealing and escaping. Because of the high value of their cattle farmers have adopted the practice of 'checking' their cattle every day. This involves counting the cattle to be sure none have gone missing and is a task often carried out by children and sometimes women. In previous years cattle were largely left alone and naturally became wild but now the practice has, simply by people and cattle becoming far more used to each other, resulted in cattle becoming less wild.

The use of water is related but more deliberate. Some farmers used the above knowledge, together with the increasing awareness that cattle need water (a message repeated by extension officers), to bring cattle to them and make both checking and counting easier and to tame and keep cattle tame. That is, farmers supply water at one place which is close to people or easily reached on a daily basis. One woman described to me how she tamed very wild cattle this way. She remained close to the water and forced the cattle to come close to her to get a drink. Another respondent used salt licks the same way. Once calves are used to people they will be tame, but to tame wild adult cattle is a difficult task and to do this with something new and unusual and potentially dangerous shows considerable initiative.

These skills were not specifically taught to farmers although it could be expected that extension officers played a part in learning from the farmers and passing the knowledge

around. Indeed (older) farmers are quite capable of 'advising' the (younger) extension officers how it should be done. One farmer was particularly proud of how he had built his stockyards (which he showed me) and how he had shown the extension officer so that he could tell other farmers how to do the same.

One additional solution to increase docility would be to farm steers instead of bulls. Because of the place of *fa'afafine* (men who behave as women) in Samoan culture Samoans do understand the advantages of steers but they still prefer bulls because they grow bigger. In addition they dislike discussing any topic of a sexual nature. In addressing this issue they are faced with two alternatives which are both repulsive to them. The choice is between castrating a bull which they cannot bring themselves to do and for which there is no agricultural precedent, or potentially letting an offspring mate with its parent. This idea is also particularly revolting as incest is abhorred in Samoan culture to the extent that to marry anyone who is even very distantly related is highly disapproved of. The solution to this whole issue is to ignore it and pretend it does not exist. Hence bulls are left as bulls.

Despite my concerns, wildness, a problem originating in the overriding technical focus of project design, turned out not to be such a problem, although escaping, a function of wildness, remains a problem and cause of social tension at times.

Farmers also showed that they would make other changes and adopt practices when they saw the need. In the time between 1987 and 1994 some new practices were adopted while others were not. Two that were adopted were providing water for cattle and building stockyards. In 1987 most respondents did not provide water for their cattle just as they did not provide water for their pigs or poultry. They believed cattle could get water "from the air". In 1987 I had identified the provision of water as a problem (Maiava, 1993).

However, the need to provide water for cattle was one of the messages repeated by extension workers and in radio programmes including messages from the Minister of Agriculture, who was well respected, a cattle enthusiast and who believed in reasoned persuasion, during those intervening years. When I returned in 1994 the change in this practice was remarkable. Almost all farmers provided their cattle with water, often piped, and they understood why this was necessary for their cattle to grow and reproduce. Only one farmer still told me his cattle got their water "from the air".

The second change was the number of cattle yards that had seemingly sprung up everywhere. No-one had cattle yards in 1987. In 1994 they had become an additional requirement to be eligible to receive cattle from the government but many other people had built them as well. Being sited on the roadside boundary they were highly visible for all to see and I suspect were fast becoming a status symbol and statement of wealth and progressiveness in their own right.

But pasture was one area that showed very little change. Very few respondents had made any attempt to plant better grass species despite the fact that the AIDAB and UNDP/FAO pasture improvement projects were holding training workshops (AIDAB), and had a large number of plots of better grass and legume species on many farms spread throughout Upolu and Sava'ii (UNDP/FAO). It was also despite the fact that technical advisors recognised that Samoans propagate using cuttings and never use seeds. Earlier projects that attempted to promote grass seeds failed when sacks of seeds were left to rot (Steven Lee, pers. comm., 1994).

Two barriers to pasture improvement exist. First, farmers cannot see why cattle cannot just eat the undergrowth. That is they cannot see the reasoning behind the need to plant pasture and how it will benefit them. They are not aware that poor nutrition due to poor quality pasture not only lowers productivity but is also a principal cause of infertility which has been found to be directly related to body weight (Stunzner, 1976; Maule, 1990:27).

Second, pasture improvement is very labour intensive. Over time farmers may slowly adopt this practice, but because of these barriers rapid adoption cannot be expected. It must be linked to both the desire of farmers for more cattle rather than bigger cattle and to farmers' growing awareness of weed infestation. An alternative approach is to consider tolerance of poor pasture when researching breeds of cattle most suitable to Samoan conditions. Fortunately tropical breeds are more tolerant of poor quality pasture (Maule, 1990:25) but the problem of weed infestation means this is not the only answer and draws attention to questions of environmental sustainability.⁵

The problems farmers faced in 1987 in rank order were: fencing (construction/ maintenance/ cost), wild cattle, lack of land, providing water, cattle escaping, family pressure, lack of replacement stock, stealing, slow return and slow reproduction, others interfering with their

cattle due to jealousy, and their own absence. Pasture and weeds were not considered problems by farmers in 1987 (Maiava, 1993).

In 1994 some of these were no longer a major issue although they remained as difficulties to a certain extent. Fencing, wild cattle, lack of land and providing water were no longer major issues. Fences had been built, water pipes and troughs installed, cattle had been tamed and use of land secured (almost all respondents were still using the same land as in 1987). Ongoing maintenance was required but the profit from cattle meant these things could be paid for. Many farmers had been surprised by just how much money they had been able to make from cattle. Pasture was still not considered a problem in 1994 but weeds had emerged as a new problem recognised by farmers.

However, other problems remained. Cattle escaping was still a problem but not a major one. Although cattle were tamer and fences better, more people had more cattle which could escape. Stealing was a more serious problem and meant that many farmers (or their children) now checked and counted their cattle regularly if not daily. Sometimes they would find just the guts and skin left on the ground. One respondent, who was also a meat inspector, identified his own stolen cattle at the butchers.

The extent of this problem is well recognised by the government but stealing is an integral part of Samoan social behaviour. Neighbours steal taro from each other's plantations to the extent that small *fale* are built in plantations where workers can sleep overnight to protect crops that are close to harvest and, in the past, even buried planks with exposed nails were used to protect crops.

Lack of replacement stock and slow reproduction were still problems. Farmers, almost without exception, wanted more cattle. Technically, productivity has two aspects: increased herd size and increased cattle size. Samoan cattle farmers were not interested in the latter but they were motivated by the former. For them reproduction is an issue and a problem, despite the fact that fertility would seem to have increased. While other factors have become less important, the loss of calves by abortion due to brucellosis or at birth was very disheartening for farmers.

Brucellosis causes 50% of calves conceived to infected cows to be aborted (Lincoln International, 1991a:Appendix 2). I noticed a significant but unquantifiable increase in deaths presumed to be caused by brucellosis between 1987 and 1994. During this time the Brucellosis Eradication Programme ended and New Zealand assistance was withdrawn. Since then farmers' perceptions indicate that brucellosis has increased, based not on empirical data but on farmers' concerns.

The issue of calving has many factors which require further research in the Samoan context. Both the cow and the farmer may have poor calving skills. Farmers are largely unaware that cows may need help to calve; after all pigs do not need help. The breed of cow is important as some calve and care for their calves better than others (Maule, 1990). The age and physical maturity of the cow is important too: Samoan farmers do not separate heifers with the result that they may calve while physically immature, damaging themselves and producing low weight calves. Tropical cattle breeds which are known to be flighty may panic during calving and make less reliable mothers.

A related topic is fertility. Tropical cattle breeds and cross breeds are slower breeders than temperate cattle, reproducing on a fourteen to eighteen month cycle rather than a twelve month cycle (Schottler, 1985; Maule, 1990:28). Water and nutrition have an impact on fertility (Maule, 1990). Stunzner (1976), working in Samoa, reported that a lack of water and poor nutrition cause a heifer's ovaries to shrivel up causing infertility and that infertility was directly related to body weight.

Parker (1980:29) recorded a calving rate of 21% in 1979 among heifers who had been distributed to Samoan farmers 21 months previously (aged 18 months) and who were by then three years old on average. In 1987 I isolated heifers of the same age also distributed to farmers at about 18 months old, and found a calving rate of 31%. Both groups should ideally have shown a calving rate of 100%. In other words, they should all have had calves. In 1994 I did not have a comparable group of cows to record but asked farmers how many calves their cows had had in the previous fifteen months as a rough measure of fertility. The answers ranged from 0% to 100% but of a total sample of 533 cows, 303 had had calves which is a calving rate of 57%. This represented quite an improvement but I am not able to attribute it to any particular variable. However, if converted to an annual figure it represents a calving rate of only 45%, a low figure in comparison to temperate cattle.

However, research in the Solomon Islands has shown that Brahman cross cattle could only achieve a maximum pregnancy rate of 77-87% in close to ideal conditions, grazed under trees with good pasture (Schottler, 1985). Rates between 40-50% were found for the national herd. Schottler concluded:

"The disappointingly low reproductive rates of Brahman cross cattle under the adverse conditions experienced in the region indicate that Brahman cross cattle are probably not the most suitable large ruminant for hot humid environments" (Schottler, 1985:71)

Once again the issue turns to breed. Brahmans were brought into Samoa on the advice of aid agencies. The criteria used in their selection may have been understandable: "to capitalise on (their) higher reproduction efficiency, higher ability to withstand poor quality pasture, higher resistance to tick infestation, eye diseases and higher growth rates" (Leavasa, 1982:59). Brahman cattle may have these characteristics in Queensland but this was not tested under Samoan conditions.

In 1993 a large shipment of Droughtmasters was imported and in 1994 the Minister of Agriculture was ready to allow a private importation of cattle from the United States (Misa Telefoni, pers. comm., 1994). Samoa now has a good range of genes to select from in conducting research. However, it could be suggested that the research needs to begin with an understanding of the criteria that would make up the ideal cattle beast for Samoan needs, both environmental and social. I would suggest the following: docility, even when left alone or badly managed, resistance to disease and parasites, the ability to stay healthy and grow on lower quality pasture, tolerance of heat, humidity and light in a tropical climate, a shorter calving interval (closer to an annual cycle if possible), higher fertility, and self-sufficient breeding i.e. cows that calve easily and have good mothering skills. Fast growth rates should be a secondary priority relative to increasing fertility. Of course both are related to nutrition (Maule, 1990:27) and faster growth would follow as the result of a package of attempts to increase fertility which would include selection of breed, pasture improvement and eradication of brucellosis.

6.7 Conclusion

Chapter 6 has shown that almost anyone in Samoa can be a cattle farmer. This provides a very large range of characteristics and a large range of experiences. Consequently there is a range of success and this will be examined more closely in Chapter 7. Cattle are becoming more popular because of their usefulness for both traditional and modern purposes and their relatively high return to labour. They have gained wide social acceptance despite sometimes causing tension. They fit well into the farming system although the clearing of land to graze cattle, which is related to cultural changes in land tenure and is not related solely to cattle, is of concern environmentally. Many of the problems cattle farmers face are of a technical nature although emigration, major life events and stealing do have an impact on cattle herds. With the exception of stealing it may be said, however, that these events may actually motivate cattle farming. That is, part of the purpose for farming cattle is to better enable their owners to cope with unexpected major life events.

Cattle have illustrated, paralleled and facilitated social change in Samoa, such as the trend towards increased individualism, although they cannot be said to have caused social change. Cattle are able to facilitate desired changes by offering wider choices, a fundamental characteristic of development (Todaro, 1994:18), and increasing diversity in already widely diversified income-generating strategies. Natural disasters have shown this is important to spread risk and reduce vulnerability.

Generally cattle farmers are doing well, although some, as would be expected, have not done so well. Just how well, and the factors important to success, will be further examined in Chapter 7. However, it can be concluded with certainty here that cultural constraints are not major among the constraints facing the smallholder cattle sector. If farmers were not succeeding with cattle then culture could be blamed because, unlike crops where farmers face disease and fluctuating and low returns to labour, cattle do not face major marketing and technical constraints. If, however, farmers were succeeding with cattle then culture could be exonerated. Thus far the latter is supported. Chapter 7 will test this hypothesis further.

Many of the ways cattle are farmed are a function of the structure of Samoan society such as the relationship between younger and older generations. Some of the ways cattle are farmed coincide with official expectations in that cattle offer a profitable income and an increased

supply of meat to the domestic market. However, many of the advantages cattle offer Samoans were not envisaged by project planners. Examples include the commercial role of being a walking bank, as well as the non-commercial roles of maintaining urban-rural linkages and offering security against unexpected events, as well as their role in *fa'alavelave*. Some of these, especially using cattle for *fa'alavelave* and as walking banks, meet with official disapproval. However, this thesis cannot conclude that Samoans are 'wrong' to use cattle in these ways.

In Chapter 6 one of the main findings has been how active and innovative farmers are in adopting a new technology and adapting it to their own purposes, whether traditional, modern or both. They have improved upon the technology which had some faulty aspects to it and learned from their experience. This is contrary to the modernisation paradigm which portrays farmers as passive adopters of technology which is introduced to them in near perfect form and which they should only use for modern purposes, but is consistent with the third paradigm which recognises farmers as active, and interactive with new technology, and identifies development as an interactive process of negotiation.

In view of the conclusions from Chapters 5 and 6, Chapter 7 asks the question whether there really are constraints at all; whether there really is a problem at all. Chapter 7, using additional data which support the conclusions of Chapters 5 and 6, will examine the success smallholders are having with their cattle.

¹ In 1993 the Department of Agriculture Economic Analysis and Planning Unit conducted an in-house Base Line Survey of agriculture in the villages of Samoa. They found that the average household size is 6 adults and 5 children under 15 years of age, or 11 people per household (Department of Agriculture, 1993).

² Actual numbers who answered each question may vary slightly.

³ However, this observation may have been too harsh. Pattie reported that Brahmans at the government farm at Lemafa were well managed and had "become very quiet" (Pattie, 1988:20). He added however, "Unfortunately this cannot be expected to be the normal situation for many years" (ibid).

⁴ Pattie (1988:20), also taking into account the tropical environment and other technical factors, recommended Droughtmasters, which were imported into Samoa in 1993.

⁵ Nevertheless excellent pasture can be grown in Samoa: one of the most impressive sights I saw was a paddock of lush emerald green (weedless) pasture right next to a paddock of neck high weeds (that had degenerated from undergrowth as a result of cattle grazing). Both were under coconuts and both were cattle farms.

Chapter Seven

The Success of Cattle Projects and Cattle Farmers in Samoa: An Historical Perspective

7.1 Introduction

Chapters 3, 5 and 6 introduced the idea that smallholder cattle farming in Samoa may be a success after all. That is, not only were *fa'alavelave* not the problem, but that there may not even be a problem. This chapter investigates this idea further.

Success can be measured as positive and sustained change over time and thus a historical perspective, often beyond the normal time limits of a project cycle, should be taken. For the purposes of this thesis the criterion of increasing numbers of cattle is used as the measure of success in order to provide concrete empirical evidence. This criterion was chosen because it was the primary criterion of success for the vast majority of cattle farmers. It was also a criterion (as was increased productivity) implied by project documents, as this chapter will show, and so its use allows a comparison or contrast with the official perspective. However, the possibility of other criteria such as increasing numbers of cattle farmers and increased farmer competency is not excluded. A study of these criteria also shows that there have been marked positive and sustained changes.

Success or otherwise with cattle may be used to test the hypothesis that culture is an obstacle to development in Samoa. Unlike crops, where environmental and commercial variables can influence success, cattle farming is less hampered by such factors. That is, O'Meara (1990) and Ronnås (1993) argued that with regard to crops it is low market prices, market access and relatively low and unstable returns to labour, rather than culture, that are the main obstacles. In contrast, cattle farmers did not find market access difficult and the returns to labour are relatively good for beef. It is possible for farmers to make a good profit from cattle for minimal effort. The World Bank estimated that in 1989 net returns to labour

for coconut production ranged from WS\$2 to \$9 per day, \$4 to \$10 per day for cocoa and \$5 to \$8 per day for passionfruit. Returns to labour for cattle, in comparison, were calculated at \$24 per day. Only low input bananas at \$26 per day and taro at \$38 per day were higher (World Bank, 1991:30).¹ Therefore if culture is a barrier, farmers should be failing with cattle, but if culture is not a barrier then farmers should be succeeding and increasing the size of their herds since other obstacles are not significant.

The first part of this chapter, then, examines the issue of success and seeks to determine whether smallholder cattle development in Samoa has failed or not over an extended time period. The hypothesis of McKillop (1989) is used to guide the assessment of project development over time and project success or failure. The history of several cattle projects is outlined.

McKillop (1989), in his historical study of the outcomes of cattle projects in several countries of Melanesia, identified a progression of phases that occurred over several decades. The initial pilot or pioneer phase, when a good idea was identified, the 'big push' or rapid expansion phase of great enthusiasm and the aid era phase of grand ambitious projects, all followed conventional patterns. That was followed by a disillusionment phase when goals were not reached, and aid funds were withdrawn as the projects were deemed to have met too many obstacles and failed. McKillop also described the establishment of a final equilibrium phase which occurred over a considerably longer time period. After project and government support had diminished, cattle were gradually accepted and integrated into the farming system. The point of equilibrium was not as grand as the original ambitious objectives but neither was it a failure.

The results of the research for this thesis, from the general surveys in 1987 and 1994, are used first to assess smallholder success, and second, to focus on the success of smallholders as distinct from success in the national herd. Two quite different pictures emerge, but only one was reported in the literature.

The second part of this chapter returns to the assumptions made about the incorporation of cattle into *fa'alavelave* introduced in Chapter 3, and analyses new empirical evidence provided by this research in order to test them. Both the six specific allegations found in project literature and the three broader assumptions relating to *fa'alavelave* are refuted.

7.2 The History of Cattle and Cattle Projects in Samoa

7.2.1 The Pioneer Phase

Cattle have been in Samoa since the last century when it was colonised by Germany:

"The German administration ... supported the private commercial plantations owned by Europeans, which had developed since the 1850s. At first these operations produced copra, but they soon diversified into cotton, rubber, coffee, cocoa, bananas, and cattle" (Gage, 1986:27)

In 1914 the German administration surrendered to New Zealand forces and in 1918 the administration of Western Samoa was formally passed to New Zealand. The 1949 film "Samoa" recorded 9,000 beef cattle in the New Zealand government run 'Reparation Estates'. This was land taken from the German administration in 1914 that later, upon independence in 1962, became Samoan Government WESTEC land. This figure did not include any village cattle. Run under coconuts, these government cattle "supplied all the beef in Samoa" (NZ National Film Unit, 1949).

In 1957, the Department of Agriculture reported that there were 13,100 cattle in Samoa, of which 12,000 were grazed by WESTEC, missions, schools and private European planters, and 1,100 grazed on village lands (Farrell and Ward, 1962:230,231). In 1962, Farrell and Ward recorded:

"Samoans are not by tradition stockmen. Raising and caring for livestock does not come easily to them .. In some villages local rules forbid the grazing of cattle. Few Samoan villages have more than a dozen beasts and cattle are by no means popular animals" (Farrell and Ward, 1962:229-230)

Interest in cattle by Samoans was slow to be recognised and cattle have often been invisible in records of Samoan agricultural and household activity. In 1970 Lockwood (1970b) did not record cattle tending (either directly or indirectly) in his data on the average number of hours spent in subsistence and cash earning activities (p15, Table 6) nor sale of cattle in his data of estimated cash income (p16-19, Tables 7a-7d) in four villages. In 1970 cattle were

few in number in the subsistence sector and not significant in the farming system.² Cattle were mostly used to 'control weeds' and clear undergrowth to make harvesting fallen coconuts easier.

Nevertheless, other authors have recognised the potential value of cattle in the Samoan farming system and the national economy, albeit usually (but not always) seeing it in the context of developing the commercial sector, offering Samoa self-sufficiency in beef and saving foreign exchange. Farrell and Ward argued that cattle could provide "one of the most important developments in Samoan agriculture. Opportunities exist for immediate and, possibly, spectacular development" (ibid, 1962:230).

The advantages were many: the use of large areas of ungrazed hinterland, areas under coconuts which are not utilised by crops but otherwise left 'idle'. Under coconuts, removal of the undergrowth would increase the coconut harvest³ and enable the breeding places of rhinoceros beetles and mosquitoes to be eradicated (Farrell and Ward, 1962:230). In addition cattle would provide another source of food and "much-needed protein", and "an extra source of income through the export of hides and the sale of fresh meat to the expanding population of Apia or to a cannery serving the general Pacific Island market" (Farrell and Ward, 1962:230).⁴

"Government goals for livestock production include the generation of rural employment and incomes, foreign exchange saving, a reduction in livestock product prices for customers, an improvement of nutrition and, in some cases, the possible development of an export trade. Most emphasis has been placed on developing a degree of self-sufficiency in livestock products" (Quartermain, 1980:261)

ADB (1985a) and AIDAB (1987) continued to see the potential for self-sufficiency and import substitution. Local livestock production accounted for only 54% by value and 40% by volume of all livestock products consumed in Samoa (ADB, 1985a:119). In addition, the demand for beef was predicted to grow further. Due to this internal demand, the export of beef has never been a major objective. Fairbairn et al.(1994) continued to point to the great potential cattle offer Samoa "to achieve near self-sufficiency in beef" (ibid, 1994:30). This has been echoed in development plans (Government of Western Samoa, 1992:5) and other

documents (Lincoln International, 1991b:1). As agriculture faces the withdrawal of labour, cattle also offer a less labour intensive alternative to cropping.

The period up until the 1970s corresponds with McKillop's pioneer phase. Initially smallholders were indirectly encouraged in that development plans gave preference to small-scale enterprises because they provided employment and encouraged the even distribution of incomes (Quartermain, 1980:261). In 1970 the national herd was estimated to be 19,774 cattle (AIDAB, 1987:33).

7.2.2 The Rapid Expansion Phase

The 'big push' or rapid expansion phase began in the early 1970s when formal cattle projects, which will be described, began. It began with the recognition that the smallholder approach was slow in achieving higher levels of production and self sufficiency, that large-scale production would be faster and more efficient, and furthermore that:

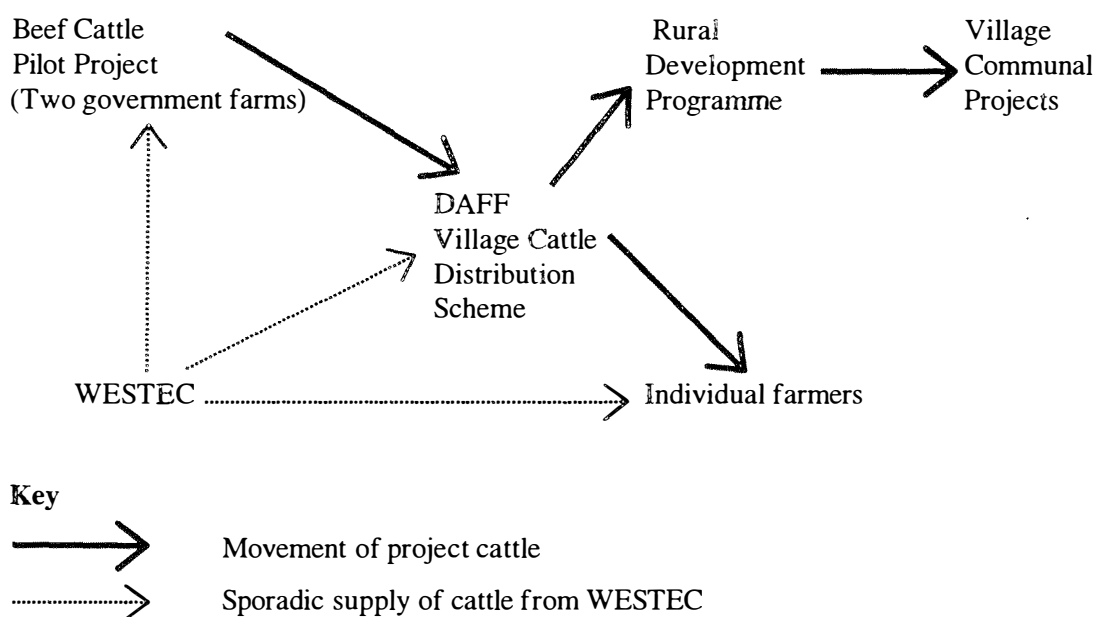
"Large-scale production also has a place in the nucleus estate strategy for development in which it provides the back-up services and supervision to smallholder producers" (Quartermain, 1980:262)

Thus the Western Samoa Trust Estates Corporation (WESTEC) received large and continuing amounts of aid funds and technical assistance but it largely ignored smallholders and functioned in parallel with cattle projects that were aimed ultimately at smallholders. It did supply cattle to both government farms and smallholders directly from time to time but this was incidental to its primary commercial purpose.

The following brief outline of the history of cattle projects in Samoa relating to smallholders is in the nature of a summary and is not necessarily complete as full access to all documents was not achieved. This summary ends in 1994. There have been many projects funded by many agencies, often running concurrently. There has often been mixed or no communication between them, even in projects where staff from different agencies were working together in the same project.

The projects which will be covered, some very briefly, are the ADB Beef Cattle Pilot Project, the DAFF Village Cattle Distribution Scheme, the Rural Development Programme, the NZ Brucellosis Eradication Programme, the UNCDF Cattle Development Programme, the FAO/UNDP Pasture Improvement Project and the AIDAB Agricultural Training Programme. Cattle have moved between the Beef Cattle Pilot Project, the Village Cattle Distribution Scheme and the Rural Development Programme, and this is shown in Figure 7.1.

Figure 7.1: The Movement of Cattle Through Cattle Projects



The Beef Cattle Pilot Project was the first large cattle project in Western Samoa, and established the foundation on which other projects were based. Funded by the Asian Development Bank, UNDP and New Zealand, it was also known as the ADB Project (Parker, 1980). Coming into operation in 1972, the project aimed to save foreign exchange by increasing the production of beef, thereby reducing meat imports. The project planned to establish a 1,000 acre government run pilot beef cattle farm and import 740 mainly female cattle. These would form a nucleus breeding herd from which breeding stock would be distributed to individual farmers. A catalogue of errors followed, which is described by the Asian Development Bank (1979).⁵

The Beef Cattle Pilot Project was criticised for selecting a poor site for the pilot farm at Togitogiga. In the end an additional farm at Lemafa was also created. These two farms remain today and continue to breed cattle for distribution. Both farms were created from cleared land; they did not attempt to run cattle under coconuts even though this was being suggested and researched elsewhere at the time (Pottier, 1984) and was potentially more applicable within the Samoan farming system. The selection of forage species was also criticised.

The importation of cattle did not go to plan. In 1972, 319 Herefords were imported from New Zealand. This was twice the number planned for that year and, as a result, pastures were overgrazed, malnutrition and mortality occurred, and reproduction rates and animal health declined. The choice of Herefords was criticised after it was found that they were not adapted to the humidity and suffered eye infections and eye cancer. In 1973, 145 cattle from government farms were distributed to smallholders for the first time (ADB, 1979:37) under the DAFF Village Cattle Distribution Scheme. Distribution in the following years averaged about 200 annually, with considerable fluctuations.

As a result of the problems outlined above, the next importation did not occur until 1977 when 299 Brahman were imported from Australia. This was rated successful, providing the raw material needed to establish a nucleus breeding herd (Asian Development Bank, 1979). Another shipment of cattle was imported in 1979. This pattern has continued. It was questioned why so many heifers were imported at a high cost rather than fewer bulls at lower cost who could have served more females from the WESTEC herds to create a nucleus herd. This had been recommended earlier (*ibid*).

The Economic Internal Rate of Return for the Beef Cattle Pilot Project was forecast to be 26.4%. It turned out to be “negative” (Asian Development Bank, 1979:26). Officially the project might be considered a failure. Rather than saving foreign exchange the value of imported meat increased sixfold in the decade to 1979 (*ibid*:26).

In 1977 cattle development received a significant boost with the beginning of the Rural Development Programme (Fairbairn, 1985:351-357). This general programme was not specifically for cattle development but was designed to provide financial and technical assistance to village community groups in order to encourage them to undertake small-scale

development projects to increase village production and improve the quality of village life (Fairbairn, 1985:351). Early ideas about cattle farming in the village sector, because of the scale thought to be necessary, envisaged communal, co-operative projects in line with the popularity of co-operatives in aid projects generally at the time, and the beliefs held about communal co-operation in villages. Thus cattle were perceived as an ideal component of this programme.

Offspring from the Beef Cattle Pilot Project were being distributed to both individual farmers and the Rural Development Programme via the DAFF Village Cattle Distribution Scheme. Giving many individual farmers only two to five cattle had been questioned (Asian Development Bank, 1979) as this herd size was too small to survive slaughtering and other pressures. Village herds were larger, and larger herds (20-25 animals) were thought to be more easily able to be supported by extension services, more economically viable and in a better position to provide animals for slaughter without jeopardising the breeding herd. Indeed, in 1987 this research found this to be the case for individual farmers with larger herds of eight to nine or more cattle (Maiava, 1993).

The Rural Development Programme was to "take into account the structure of the Samoan society ... "planning from below" to accommodate the fierce autonomy with which villages conduct their affairs" (Fairbairn, 1985:352). All projects were negotiated with the village council of *matai (fono)* through the *Pulenuu* ('mayor' and official link with government). All projects were to be communal and involve the whole village and benefit the whole village. While this would seem to "take into account the structure of Samoan society" (quoted above) and many projects were successful for a time, it failed to recognise that villages were not the units of production in Samoa.

Villages paid for 35% of the total material input (of which 5% had to be cash and 30% could be a loan) and the remaining 65% was met by a government grant (with funds from Australia, New Zealand and the European Development Fund). The government also supplied subsidies, extension services and transport. The project expanded rapidly and, after two years, 544 projects had been approved (Fairbairn, 1985:353). 88 were cattle projects (in 88 villages), the second most popular project after pig fencing (111) and just ahead of fishing (84) and banana projects (81) (ibid:354).

Fairbairn was largely approving in his assessment of the programme:

"[the Rural Development Programme] has succeeded in putting into practical operation a number of principles much talked about in the literature of rural development: community self-help, planning from below and the use of traditional forms of organisation ... [resulting in] the active participation by key village groups in the identification, development and implementation of projects ... [and it] has undoubtedly stimulated interest in development among village communities" (Fairbairn,1985:355-356)

Undoubtedly the Rural Development Programme was instrumental in increasing the interest in cattle among villagers. Cattle numbers gradually increased and the 1979 South Pacific Agricultural Survey, using unpublished ADB statistics, estimated the number of cattle in Samoa at 26,300 (Quartermain, 1980:280). Of these, 30.4% were smallholder or village cattle. Cattle numbers were estimated at a maximum of 27,983 in 1979 (AIDAB, 1987:33). How these figures were reached is uncertain as "there has been no census of livestock numbers in Western Samoa ... the population ... held by smallholders are estimates" (AIDAB, 1987:8).

In hindsight it is easy to criticise two factors. The first factor was the insistence that projects be communal which, as we saw in Chapter 6, have a limited life-span. But communal projects gave many people experience with cattle, many of whom later obtained their own cattle. In villages where the village herd was eventually split up, it became the foundation for several household herds, although this was not always the case. In Chapter 6 the case of the village herd of Sato'alepai was considered and it was argued that group herds have a seminal place in the learning process of cattle farmers as long as this short-term nature is recognised and planned for.

The second factor was the high levels of government subsidy which were available to both village group and individual recipients. Subsidies were blamed for villagers quickly selling their cattle to butchers and making an instant profit, and for undervaluing the true worth of their cattle and soon killing them for *fa'alavelave* (Asian Development Bank, 1979; Parker, 1980).

"The present distribution system constitutes an encouragement for the farmers to use the Project cattle for slaughtering rather than breeding ... the fact that animals are being sold to the farmers at a price which is four times lower than their meat value could encourage profitable reselling of these cattle for meat" (Asian Development Bank, 1979:20)

"There is sufficient evidence to state that the distribution system of cattle by the government in the 1970's was not in the best interests of establishing a sound beef industry ... cattle distributed by the government were in many instances misused; and either used or sold by recipients without supporting the good intent of the government. The high subsidy encourage[d] misuse. The favourable financial conditions under the Rural Development Programme ... was conducive to exploitation of the distribution scheme" (AIDAB, 1987:49)

Undoubtedly some slaughtering did occur and, as a consequence, subsidies were reduced in subsequent cattle projects. The subsidies also created a dependence on the government for the supply of cattle as it did not make economic sense to obtain cattle from elsewhere at market prices.

But the subsidies also meant that cattle became established in villages without villagers incurring high levels of debt. McKillop has found that farmer debt was one of the significant factors that undermined the viability of cattle farming in Melanesia (McKillop, 1989). In Samoa, in contrast, farmers do not have a tradition of incurring debts and demand for credit is low (World Bank, 1991:22) due to the low-input nature of the farming system, access to remittances and the ability to ask relatives for money for specific purposes.

In the late 1970s and early 1980s subsidies were lowered to 30% (AIDAB, 1987). From 1985, new regulations were introduced which required farmers to have (relatively) secure access to land, adequate fencing and a water supply. These facilities were inspected by Livestock Section extension officers before farmers could receive cattle. Farmers had to sign a contract which stipulated that they would not slaughter project cattle within specified time periods (six years for heifers, three years for bulls and 18 months for steers), or they would face a \$200 penalty, have to repay the subsidy and be blacklisted from the waiting list for

future cattle. It is under these tightened conditions that the farmers in this research received their cattle.

In this research 63% of farmers were able to recall the conditions of the contract quite accurately while many others recalled the essence of the basic requirements. When farmers were asked how they felt about these requirements, 80% felt they were a good idea, some with the proviso that the government keep their part of the agreement (the provision of services). While some farmers were ambivalent, only 5% were actually opposed to the contract. Many found the contract very useful as an excuse to explain to relatives why they could not contribute cattle to *fa'alavelave*. While 45% said they were not going to slaughter project cattle anyway, 43% believed the contract had stopped them slaughtering.

AIDAB concluded that the new policies and regulations that were introduced "resulted in a more responsible attitude of the recipients and also encouraged the potential for greater productivity" (AIDAB, 1987:49). All participants, including planners, were going through a learning process.

The DAFF Village Cattle Distribution Scheme was administered by the DAFF Livestock Section at Avele. Access to cattle was on a first-come-first-served basis. Eligibility requirements, outlined previously, were minimal. Waiting lists became long and farmers might have to wait two to three years for cattle. This had the potential for corruption to creep in: potentially a friend of the minister or staff member might be moved nearer the top of the list. There is no evidence that this happened, although I believe it may have in one instance, but it was probably a rarity. The system was largely devoid of corruption, based on my knowledge of the local staff concerned, and indeed was actually very fair.

While cattle from the Beef Cattle Pilot Project were distributed to farmers they were also mixed with other government cattle, cattle received under bilateral aid and cattle purchased from WESTEC. In other words the DAFF Village Cattle Distribution Scheme distributed cattle from all these sources (ADB, 1979). Although the numbers of cattle distributed were recorded they were not followed up (Parker, 1980). What farmers did with them or how they coped was not recorded (ADB, 1979).

The distribution of cattle to both individual farmers and the Rural Development Programme for village groups put enormous pressure on the breeding herds on the two government farms. Faced with farmer demand for cattle most of the offspring from the original breeding cows and even some of the breeding cows themselves were distributed. Thus the breeding cows, the nucleus herd, were not replaced, eventually becoming too old. In addition very young heifers, often eight to ten months old were distributed (AIDAB, 1987:49).

In order to keep up with demand, more breeding cattle had to be imported. This problem was the same every year. In 1987, AIDAB reported "the demand for cattle is now greater than the government can supply" (AIDAB, 1987:49), although this was nothing new, and recommended further importation of heifers for breeding. In the five years prior to 1991 only 569 cattle were supplied to farmers by DAFF, although it had received applications for over 3,000 cattle (World Bank, 1991:43).

It is ironic that farmer demand put such pressure on the industry and caused such anguish; other projects lament the lack of farmer willingness to adopt new technology. Yet in this case planners never sought to use this to advantage. Private breeders (who are now emerging to supply an eager market) were not actively encouraged and other lower cost, lower risk options such as artificial insemination or importing bulls to breed with local stock, rather than many heifers, as had been recommended (ADB, 1979), were not considered seriously. Cattle distributed to farmers were going to breed with local stock within a generation or two anyway, and have done so. Importation of large numbers of heifers was costly and risked the importation of disease, as occurred with brucellosis.⁶

7.2.3 Disillusionment

The disillusionment phase began in earnest in the late 1970s. From a high of 27,983 cattle in 1979 the national herd began to fall in the early 1980s, from 26,284 in 1980 to 20,052 in 1984. AIDAB estimated the population to be 19,600 in 1987 (AIDAB, 1987:33). These figures are shown in Table 7.1.

Table 7.1: Estimates of Numbers of Cattle in Samoa (The National Herd)

Year	Number	Source
1949	9,000	"Samoa", 1949 Film
1957	13,100	Farrell and Ward, 1962
1970	19,774	AIDAB, 1987
1979	26,300	Quartermain, 1980
1979	27,983	AIDAB, 1987
1980	26,284	AIDAB, 1987
1984	20,000	ADB, 1985
1984	20,052	AIDAB, 1987
1987	19,600	AIDAB, 1987
1989	24,096	Agricultural Census, 1989 (Department of Statistics /Department of Agriculture, 1990)
1994	33,000	Fairbairn et al., 1994

These figures illustrate that there was undoubtedly a crisis in the early and mid-1980s, when cattle numbers declined significantly. This corresponds with McKillop's phase of disillusionment.

In 1979 the Prime Minister had "expressed concern" at the lack of information about what was happening to project cattle (Parker, 1980:28). Until then information about farmers' behaviour was based only on anecdote but cattle farming was believed to be in a pretty sad state of affairs. In 1980, Parker, the new expatriate Chief Livestock Officer conducted a survey in response to the Prime Minister's request to find out what had happened to project cattle (Parker, 1980).

Parker surveyed 818 project cattle on 199 farms, an average of 21 months after the cattle (on average 1 bull and 4.8 heifers) were distributed to farmers. Overall only 68% of the original cattle remained. Twenty-one percent of farmers had increased numbers, 33% had maintained numbers, 20% had some deficit and 26% had no cattle left at all (Parker, 1980:29). These results are compared to findings from this research in 1987 in Table 7.2.

**Table 7.2: Progress with Project Cattle: Surveys by Parker in 1979
and Maiava in 1987**

The Sample	Parker 1979	Maiava 1987	Maiava 1987 Adjusted ^{*1}
Sample size (No. farmers)	199	64	21
Av. months after receiving cattle	21	16	21
Total number cattle received	818	308	119
Progress^{*2}			
% of Farmers who			
Increased numbers	21	19	33
Maintained numbers	33	51	33
	} 54	} 70	} 66
Had some decrease	20	17	14
Had no cattle left	26	13	19
	} 46	} 30	} 33

^{*1} To achieve a better comparison with Parker, late receivers were removed to create a sub-sample that had had cattle an average of 21 months. However, with only 21 respondents in this sub-sample the results can only be considered indicative.

^{*2} All progress figures in Table 7.2 are percentages.

Sources: Parker (1980:28-31), Maiava (1993:253); Fieldwork, 1987.

Parker concluded that:

"one fifth of the recipients of cattle were taking the game seriously, but one quarter did not even try, and probably never intended to be serious farmers. In between these extremes the one third who maintained numbers probably included most of those to whom the ownership of some cattle was itself the be-all and end-all of their cattle farming ... many of the remaining one fifth, who had some degree of deficit, probably were genuine tryers but were defeated by management problems" (Parker, 1980:29,30)

The results, he said, were "disappointing [but] it is reasonable to assume, however, that better follow up and more advice could have brightened the picture quite markedly. The

writer can hazard no guesses as to why these aspects of the project were apparently virtually neglected" (ibid:30)

Nevertheless the pattern that was established (distributing small numbers of cattle to inexperienced farmers and expecting them to cope with very little support) continued into the 1990s. Farmers were supposed to receive regular visits every three months or so but this was not always undertaken, despite the best of intentions, as the Livestock Section suffered from staff shortages, vehicle breakdowns and lack of funds for petrol over many years (confidential pers. comms., 1987, 1994). In the course of this research some farmers who were revisited in 1994 welcomed us saying they were glad someone had remembered them because they thought they had been completely forgotten.

Certainly some injudicious slaughtering, encouraged by the high subsidies, had occurred. But another major reason for the decline in cattle numbers was due to bovine brucellosis which had been imported with aid cattle and which need never have occurred if aid suppliers had been more diligent (confidential pers. comm., 1994). Brucellosis causes the spontaneous abortion of calf foetuses: 50% of calves conceived to infected cows are aborted (Lincoln International, 1991a:Appendix 2).

From 1983 to 1991 a Brucellosis Eradication Project was funded by New Zealand. The method chosen required the testing of all herds and slaughtering of positive reactors. 6,000-7,000 cattle were tested each year which absorbed considerable manpower and meant that extension services suffered. Large numbers of cattle were slaughtered which limited growth of the national herd. Although the incidence of brucellosis was reduced to 0.12%-1.9% in Savai'i, the project was less successful in Upolu where the incidence was 20-24% in 1991 (Lincoln International, 1991a:1, 1991b:13). The project was discontinued in 1991.

Some observers felt the culling rate was too severe (ADBa, 1985:120) and was negating other efforts to increase cattle numbers. The method of testing and slaughter of positive reactors was chosen because an alternative method of vaccinating all cattle would mean that no beef could be exported for five years, due to the residual effects of the vaccine. This decision is now, in hindsight, very debatable (confidential pers. comm., 1994). Because of brucellosis, beef from Samoa cannot be exported. Although there is a canning factory in Samoa, it cans imported (brucellosis free) beef.

Lincoln International concluded however, that:

"The presence of brucellosis is not the major constraint to cattle production in Western Samoa. The low reproductive rate ... (in the absence of brucellosis) and the high offtake of cattle are more important" (Lincoln International, 1991a:1)

However, this research found indications that brucellosis is still having a major impact on fertility as discussed in Chapter 6.

New Zealand withdrew their contribution to cattle development in Samoa largely on the basis of the failure of the Brucellosis Eradication Programme and after the review report by Lincoln International (1991a,b). Interestingly, it was acknowledged to this writer that New Zealand did not have sufficient expertise in farming cattle in the tropics and it was best left to the Australians (Geoff Lawson, pers. comm., 1994).

An evaluation of the Beef Sector by AIDAB in 1987 found an industry in crisis:

"The Western Samoa Beef Sector is faced with many constraints including a decreasing cattle population, declining Government resources ... and an absence of a consolidated industry (p(i)) ... The Western Samoa Cattle Industry is at a crossroad. Declining numbers and low productivity of cattle reflect an unplanned industry with problems which require close examination and firm action (p1)" (AIDAB, 1987)

WESTEC was assessed as being profitable but inefficient. Poor management decisions had led to declining productivity. It was in disrepair, had problems with theft, high levels of brucellosis, low calving rates and its herd size was declining (AIDAB, 1987:48).

In both the ADB 1979 Audit Report and the AIDAB 1987 Report farmers were hardly mentioned apart from their assumed tendency to slaughter cattle unnecessarily, supposedly because of the subsidy effect and social pressures to provide for *fa'alavelave*. These were outlined in Chapter 3. Farmers were only considered in discussions about the development of a policy on the distribution of cattle to farmers: what quantities and combinations of

cattle should be distributed, pre-conditions and the basis of the price. AIDAB recommended, for example, that distribution should be based on providing ten heifers and one bull to present farmers with at least ten cattle already or to new farmers with fencing and yards. Prices of heifers should be equivalent to market prices based on dress carcass weight and there should be no incentives or subsidies (AIDAB, 1987:7). The desires of farmers, their needs or how they might incorporate cattle into their farming system were not considered apart from the obligatory requirement to "improve extension strategies" (AIDAB, 1987:61). As well as no consideration, no funds were allocated in this area either.

During the disillusionment phase the aid era continued concurrently. The 1987 AIDAB report outlined a programme for project rehabilitation: more of the same but bigger and better. This included recommendations for fourteen new projects within the project, including rehabilitation of the government farms and WESTEC, staff training, new legislation, pasture research, better inspection and quarantine services and the building of a national abattoir (AIDAB, 1987), all of which would require large amounts of aid funding.

Although many of these recommendations never eventuated, there have been many cattle projects in Samoa over many years with varying degrees of success. The UNCDF Beef Cattle Development Project provided capital funding for Government and WESTEC facilities such as fences, yards, water supplies and pasture improvement. UNCDF simply provided capital and the projects were executed by other agencies. For example UNCDF project SAM/85/001 financed UNDP project SAM/86/003 which included a consultancy report that recommended the importation of Droughtmaster bulls (Pattie, 1988). Seventy-five Droughtmaster bulls were imported and distributed to Government and WESTEC herds. Some did not adjust well to Samoan conditions and were ineffective breeders and at least eight were detected as brucellosis carriers (Lincoln International, 1991b:13). The FAO/UNCDF Beef Cattle Development Project had also included funding for farm management training but this had been withdrawn by 1991 (GRM International, 1991:1).

The IFAD Livestock Development Project which focused on pigs, goats and poultry was originally intended to expand into cattle in 1990. However, it was relying on a supply of stock from WESTEC at a time when WESTEC was facing the heavy slaughter of brucellosis reactors, declining production and impending privatisation. WESTEC supplied few, if any,

cattle to the IFAD project and so its cattle component was never fully activated (Lincoln International, 1991b:13).

For many years more staff and improved training had been recommended (e.g. AIDAB, 1987:48,49; Pattie, 1988:5). The AIDAB Livestock Training Project, totally funded by Australia, began in 1991. It included tertiary education for students in Australia, the Philippines and Samoa, in-service training for Livestock Section staff overseas and in Samoa, and, as a result of the withdrawal of FAO/UNCDF from this area, training in basic farm and livestock management, in the form of workshops, for staff and smallholders (GRM International, 1991). These were conducted by GRM International, a private Australian consultancy firm that had had extensive experience in smallholder cattle projects in Vanuatu.

This writer observed a workshop at the Livestock Section at Avele (in Apia) for smallholders on pasture improvement in 1994. A mixture of owners and workers, including one woman, were instructed on types of pasture and pasture management, shown videos made in Vanuatu (AIDAB, AIDAB/GRM, n.d. a/b/c) and demonstration plots. The course was quite technical and conducted in English by two Australian pasture consultants who were in Samoa for one to two weeks. Much went over the heads of those with limited English and at least one person fell asleep. To a limited extent, interaction with participants was encouraged and farmers' experience was incorporated into the discussion. However, anything farmers suggested that the trainers were unfamiliar with was ignored and the trainers did show subtle signs of frustration when their set agenda was diverted. I was not aware whether their recommendations were ever put into practice although many participants did show considerable interest.

At the same time FAO/UNDP were conducting an ongoing Pasture Improvement Project (Cattle Development Project, SAM 86/003). The FAO/UNDP project involved setting up about 45 pasture observation plots on farms throughout Savai'i and Upolu and implementing localised farm-based workshops. It was staffed by a UN volunteer in 1994 who, unlike the AIDAB trainers described above, was permanently based in Samoa and had attempted to build up considerable local knowledge and rapport. Seeing his role as a facilitator, he reported increasing adoption of improved pasture species (Steven Lee, pers. comm., 1994).

However, as a UN volunteer he lacked status and his term was completed in late 1994. This project entered a state of limbo because of UNDP funding cuts.

Pasture had been identified as a constraint several decades earlier. Farrell and Ward (1962) reported that the Department of Agriculture had started a trial of local and introduced pasture plants. Thus pasture has been trialled for over thirty years. Farmers have continued to have only limited interest in pasture, however, remaining largely unaware of technical concerns that undergrowth has limited nutritional value.

There was no official or planned co-operation between the FAO/UNDP project and other concurrent projects involved in pasture improvement which increased the possibility that farmers received mixed messages. However, in 1994 the staff involved were co-operating purely on the basis of personal initiative.

What can be concluded is that Samoa had a huge and confusing number of cattle projects occurring, often simultaneously, and large amounts of aid funding was being absorbed. Most of this went into the establishment of infrastructure, cattle importation, the government farms and WESTEC. Livestock Section staff, always understaffed and under-resourced with respect to servicing smallholders, were often having to give more of their attention to project administration than they were able to give to farmers (AIDAB, 1987:48; confidential pers. comm., 1994). This meant that on one hand cattle farmers were visited frequently but on the other hand were relatively free to farm cattle as they chose, and this may have inadvertently facilitated some of the independence and initiative described in Chapter 6.



Plate 59. Recently imported cattle in quarantine on the government farm at Lemafa.



Plate 60. Transport is sometimes difficult for livestock extension officers.



Plate 61. A pasture species demonstration plot.



Plate 62. A pasture improvement workshop. The 'uppers' and 'lowers' (Chambers, 1997) can easily be identified.

7.3 The Turnaround

7.3.1 The National Herd

The 1989 Agricultural Census recorded the total population of cattle in Samoa as 24,096 (Department of Statistics/Department of Agriculture, 1990:25).⁷ This was already significantly above the AIDAB 1987 estimate of 19,600, and a 23% increase in just two years. As this rate of increase is highly improbable, the earlier estimate was almost certainly too low. What the census showed was that what farmers were achieving had been seriously underestimated. It is possible that the belief in a declining cattle population, which dominated the thinking in the 1987 AIDAB Report, was a myth.

The rapid rise in cattle production appeared to begin in the late 1980s. From 1986 to 1989 commercial production of beef increased 57% (Government of Western Samoa, 1992:4). This would have to a certain extent included smallholders who sold their cattle commercially. WESTEC does not account for the increase and there were not enough large fully commercial herds to account for it either. All of this increase entered the domestic market as no beef is exported from Samoa due to brucellosis.

Statistics from commercial slaughter houses show that the number of privately owned cattle slaughtered increased from 1,382 in 1985 to 1,720 in 1992. Their average dressed weight increased from 334 pounds (152 kilos) to 370 pounds (168 kilos) (Department of Statistics, 1992:28). These figures are only indicative as most cattle are actually slaughtered on their owner's property before being brought to butchers on the back of a pick-up.⁸ However, they contribute to the building of a consistent picture which shows that cattle farming in Samoa was succeeding. The sale of fresh meat has also expanded rapidly with the number of retail butcheries in Apia doubling from five to ten between 1987 and 1994.

The Seventh Development Plan 1992-1994 records that while the period of the previous development plan "was characterised by falling production of most export crops: copra, cocoa, bananas and passionfruit ... [and] overall, agricultural production was static ... [in contrast] livestock production was buoyant" (Government of Western Samoa, 1992:20). Between 1986 and 1989 commercial production of beef (which includes sales by smallholders) increased 57%, while pork increased 30% and taro 11%. All other products

fell: copra -18%, cocoa -14%, bananas -56%, passionfruit -10% and fish -24% (ibid, 1992:4). The Seventh Development Plan promised "a significant increase of effort in the livestock field, reflecting the relative success of this subsector" (ibid, 1992:71).

Fairbairn et al., (1994) also give figures showing the increase in cattle production from 1988 to 1994 (using a 1982 baseline). This is reproduced in Table 7.3.

Product	1988	1989	1990	1991	1992	1993
Copra	58.5	62.5	29.5	2.3	1.4	1.4
Taro	146.6	186.3	167.7	191.4	182.1	198.4
Fish	75.3	68.9	62.2	17.6	44.2	51.3
Bananas	55.6	42.3	16.9	21.0	11.3	10.0
Cocoa	24.8	47.8	0.9	0.9	-	-
Beef	127.1	159.3	166.1	169.5	171.2	174.6
Pork	312.5	325.0	337.5	343.8	343.8	331.3
Passionfruit	300.0	280.0	140.0	51.1	-	-
Poultry	33.3	20.0	26.7	26.7	26.7	26.7

Source: Central Bank of Samoa (1994) *Bulletin* 9 (1) quoted in Fairbairn et al., (1994:92, Table A22)

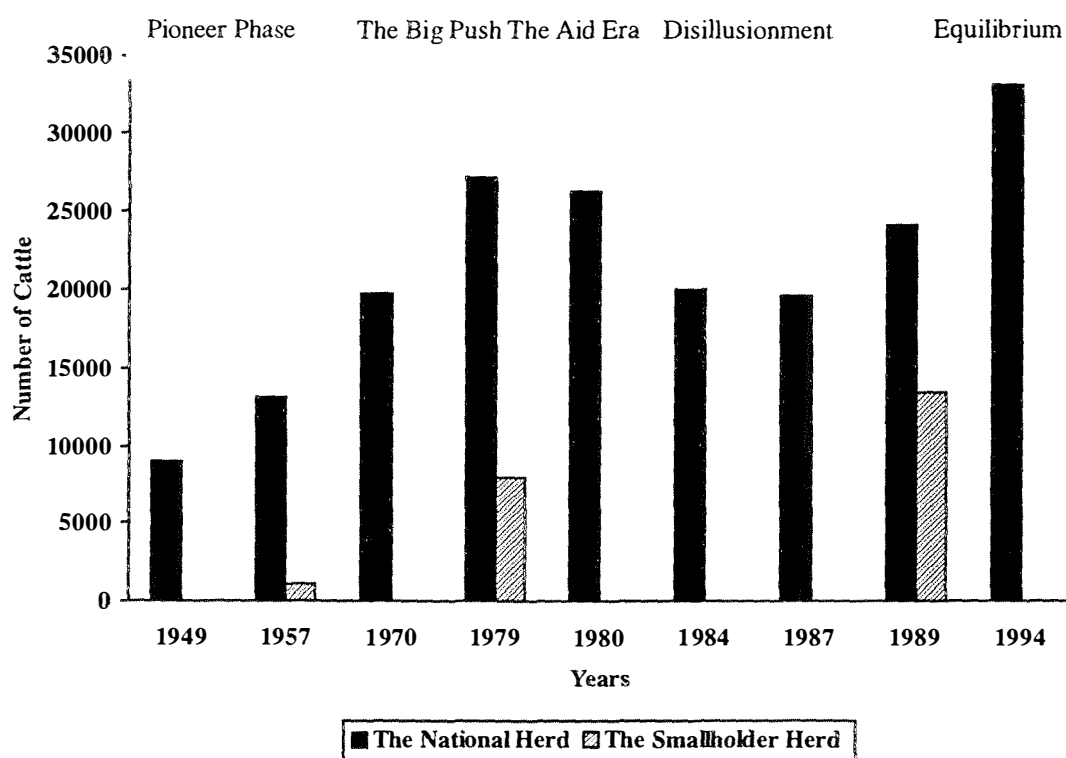
This table shows how well cattle were doing compared with many other agricultural products, for example copra, fish, bananas, cocoa, and passionfruit, which all showed a steady or rapid decline.

In 1994 the national cattle herd was estimated to be 33,000 (Fairbairn et al, 1994:30) which would suggest a rather dramatic increase of 37% in cattle numbers between 1989 and 1994 (that is, over five years), or an even more dramatic increase of 68% between 1987 and 1994 (that is, over seven years) if we use the 1987 AIDAB figure. These figures are, however, consistent with the findings of this research of a 66% increase between 1987 and 1994.

The history of the national herd to 1994 is shown in Figure 7.2. Figure 7.2 illustrates several things. First, there was undoubtedly a crisis in the early and mid-1980s, when cattle numbers

did fall. This crisis was also recorded in the first survey for this study in 1987 which indicated that smallholder cattle farmers were not being successful with their cattle in terms of herd numbers. In 1994, however, this research also recorded the recovery which these figures also record, even though it was not expected. Second, is the importance of longitudinal studies to observe long term changes. Third, it cannot be assumed that trends continue. That is, present observations should not be extrapolated into the future. What is observed here are fluctuations rather than a consistent trend.

Figure 7.2: Numbers of Cattle in Samoa (The National Herd)



Sources: See Tables 7.1 and 7.4

7.3.2 Success in the Smallholder Sector

The number of cattle in the village sector and their proportion of the national herd, although less well recorded, have likewise risen over time. In 1957, there were 1,100 cattle in the village sector (Farrell and Ward, 1962:230). This represented 8.4% of the national herd. In

1979, 30.4% of the national herd of 26,300 (or approximately 7,995 cattle) was in the smallholder or village sector (Quartermain, 1980:274,280).

In 1989 the Agricultural Census recorded 13,431 cattle in the household (village) sector and 10,665 cattle in the non-household sector (Department of Statistics/Department of Agriculture, 1990:25). That is, in 1989, 55.7% of cattle were in the household or village sector and only 44.3% held on the government farms, WESTEC or commercial farms. These figures are summarised in Table 7.4 and Figures 7.2 and 7.3.

From 1989 WESTEC virtually collapsed and the government decided to privatise or lease out much of the land (Fleming and Hardaker, 1995:69). Much of the WESTEC herd was dispersed to village smallholders or private commercial farmers.⁹ It is not known how many cattle are in the village sector compared to the commercial/government sector in 1998 but the percentage in the village sector is likely to have increased substantially.

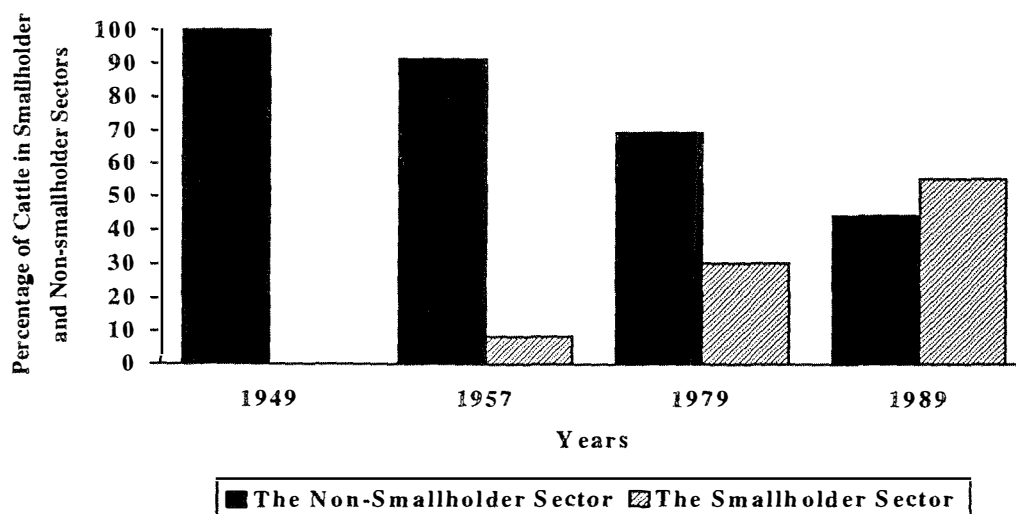
An examination of the data presented (see Figures 7.2, 7.3 and Table 7.4) shows that, despite fluctuations, the smallholder sector has been consistently increasing during the past four decades. Even more spectacular than absolute cattle numbers is the increase in the proportion of the national herd farmed by smallholders, from virtually nil in 1949 to 56% in 1989. It is undoubtedly higher since the demise of WESTEC and with continuing government support for the smallholder sector since then. In the long term it appears that much of the criticism of smallholder farmers and the cultural context in which they function does not stand up to scrutiny.

Table 7.4: Numbers and Percentages of Cattle in the Smallholder and Non-Smallholder Sectors

	Smallholder Sector Number	%	Non-Smallholder Sector Number	%	Total (National Herd)
1949			9,000	100%	9,000*
1957	1,100	8.4%	12,000	91.6%	13,100
1970					19,774
1979	7,995	30.4%	18,305	69.6%	26,300
1979					27,983
1980					26,284
1984					20,052
1987					19,600
1989	13,431	55.7%	10,665	44.3%	24,096
1994					33,000

All figures are estimates except for the 1989 Agricultural Census figures. Sources are given with Table 7.1. * = assumed

Figure 7.3: Percentages of Cattle in the Smallholder and Non-Smallholder Sectors over Time



Sources: See Table 7.4

7.3.3 Success Found in This Research

In 1987 this research found that respondents were not successful, in terms of cattle numbers, with project cattle, although it was somewhat better than the comparable progress recorded eight years earlier in 1979 by Parker (1980). An average of 16 months after receiving cattle (measuring only project cattle received, not the total herd) 19% of these farmers in this study had increased numbers, 51% had maintained numbers, 17% had decreased numbers, and 13% had no cattle left. This is compared with the findings of Parker's research in Table 7.5, columns A and B.

Despite the lack of success with project cattle, farmers in 1987 claimed considerably more success with their total herd, with 54% claiming to have increased cattle numbers since they started (Table 7.5, Column C).¹⁰ However, because of the high level of static or negative progress, including considerable numbers of farmers having no cattle at some stage, a fairly dismal picture with more dropouts and limited progress was expected in 1994. It came as a surprise then to find that considerable progress had been made. This is shown in Table 7.5, Column D and Table 7.6.

Between 1987 and 1994 59% of respondents had increased the size of their herd while 20% had no herd remaining and had ceased cattle farming.

In 1987 among 64 respondents the average herd size was 13, median 8 and the range was 0-72 cattle, but 8 had no cattle left. Thus, out of the 56 actual herds, the average herd size was 15 cattle, median 9 and range 1-72. In 1994, when all respondents, including those with no cattle, were followed up, 51 respondents had an average herd size of 25, a median of 15 and a range of 0-150.¹¹ However, 10 had no cattle so out of 41 actual herds the average herd size was 31, with a median of 24 and a range of 1-150. This is summarised in Table 7.6.

Table 7.5: Farmer Progress in 1987 and 1994 I

	A ^{*1} 1979	B 1987	C 1987	D 1994
Number respondents	199	64	65	51
Time period	21 months	16 months	Since starting	7 years
Herd	Project cattle only	Project cattle only	Total herd	Total herd
Progress ^{*2}				
% Farmers who				
Increased numbers	21	19	54	59
Maintained numbers	33	51	11	2
Had some decrease	20	17	6	15
Had no cattle left	26	13	12	20
Ran down to zero and started again	-	-	17	4
Totals	100%	100%	100%	100%

^{*1} From Parker (1980:29)

^{*2} All progress figures in Table 7.5 are percentages

Sources: Parker, 1980; Fieldwork 1987, 1994.

Two conclusions can be made. First, not all cattle farmers are successful, and second, those that have been successful managed to double their herd sizes on average, from 15 to 31 cattle, in seven years. That the median remained about 6-7 cattle below the average (a gap which is proportionally halved in 1994) indicates that while some cattle farmers are very successful, others are not far behind and are even catching up.

In 1994 the 51 respondents traced had 1,263 cattle.¹² Ten of these respondents had no cattle. So 41 farmers had 1,263 cattle. These same 51 respondents had had 761 cattle in 1987.¹³ The increase from 761 to 1,263 cattle is a 66% increase in 7 years, despite the fact that 20% of respondents no longer had cattle. This increase does not take into account any new farmers who began farming cattle during those years. The evidence from Sato'alepai and elsewhere suggests this would add considerably to the increase.

Table 7.6: Farmer Progress in 1987 and 1994 II

	1987	1994
Number Respondents	64	51
Number with cattle	56	41
Number with no cattle	8	10
Total number of cattle	816	1,263
Average herd size		
- all respondents	13	25
- those with cattle only	15	31
Median herd size		
- all respondents	8	15
- those with cattle only	9	24
Range herd size		
- all respondents	0-72	0-150
- those with cattle only	1-72	1-150

Source: Fieldwork, 1987, 1994.

A study of farmer progress in Tables 7.6 and 7.5 raises several issues. First is the issue of time: 16 months or even 21 months (Parker, 1980) is too short a time period to measure success or failure, while the seven year period over which this research was conducted offers a more accurate analysis.

Second, many farmers were not successful and experienced complete depletion of their herd at some point. This however, is not an indicator of overall long-term success or failure but is rather part of the overall learning process. It is to be expected that some will find they are not suited to cattle farming. However, the learning process might have occurred less expensively if some of the factors identified by this research were known at the time.

The experience of most cattle farmers showed considerable and sometimes extreme fluctuations, including those who were successful in the long term. In the course of this research each farmer described the history of their herd and a time-line representation was drawn for each. Three typical representations are shown in Figure 7.4

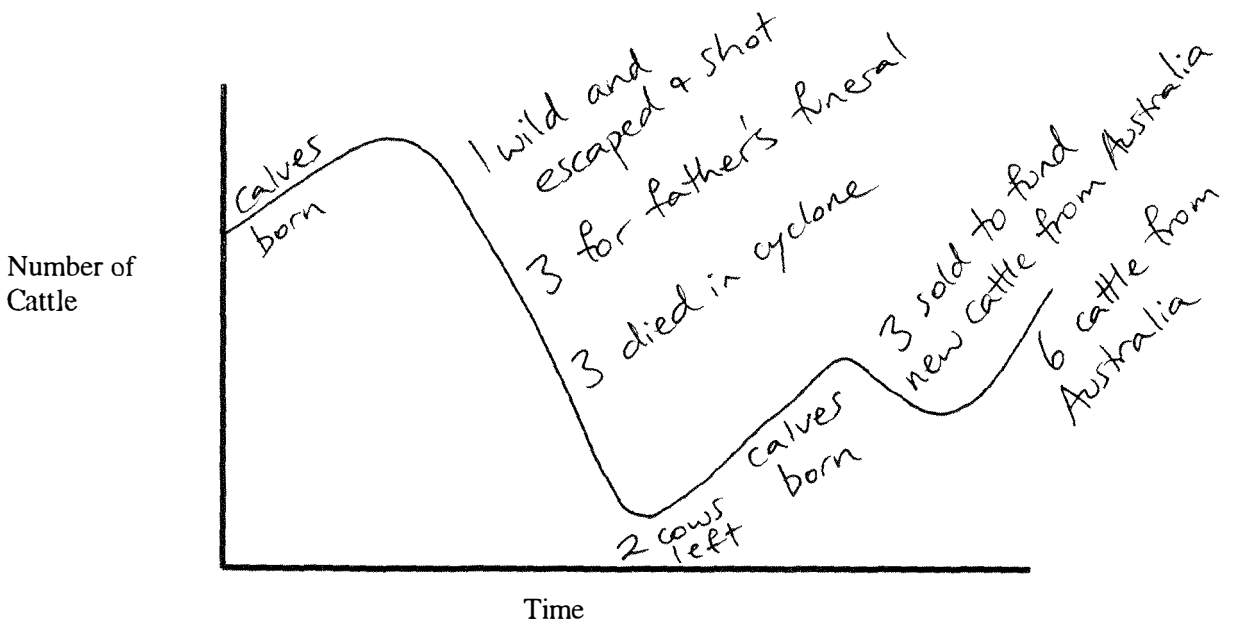
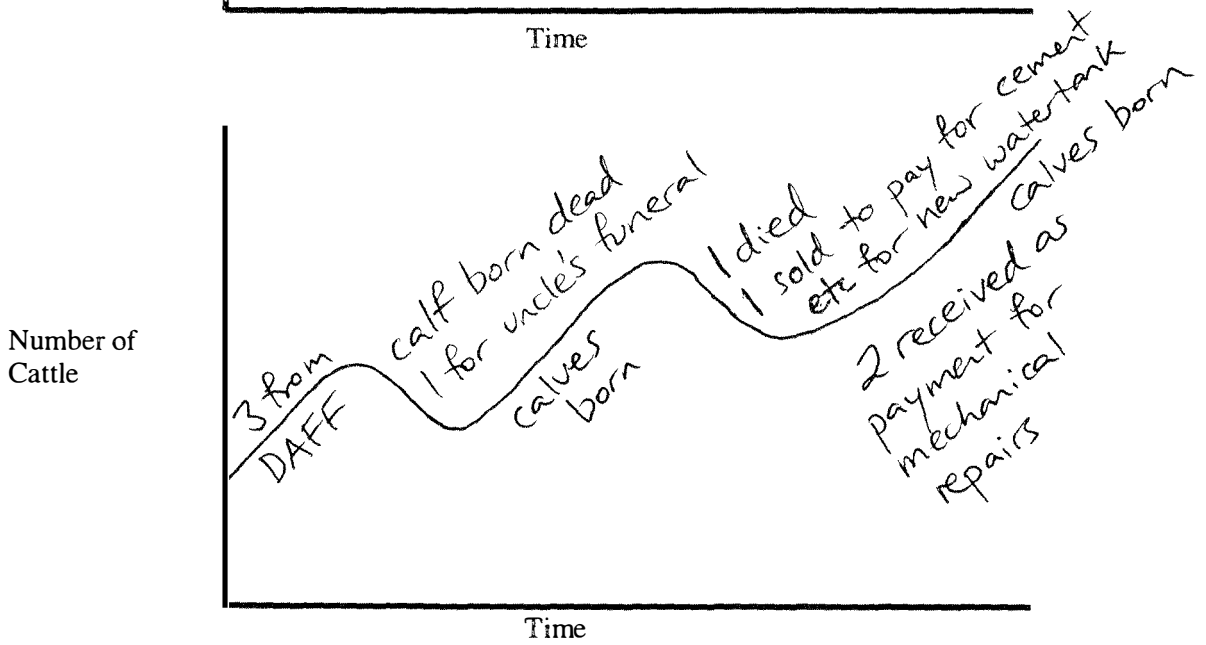
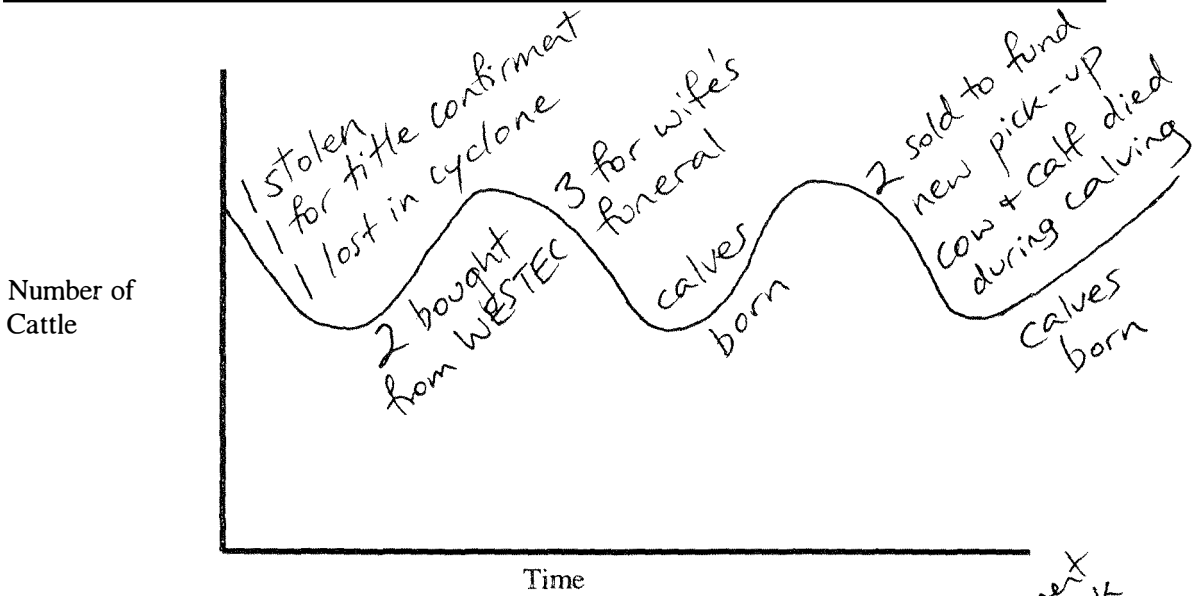
Who were the successful farmers? Was the variation in success related to other variations among farmers? For example, was failure related to absentee owners or years of experience or other social factors? Factors that were statistically significant¹⁴ in 1987 (Maiava, 1993:251-252) were:

- Owner permanently overseas: 55 percent of herds with no cattle had overseas owners.
- First time cattle farmers: in 1987 first time cattle farmers showed no progress at all and were twice as likely to experience total herd depletion.
- Herd reduced to zero previously: farmers who had done so were two and a half times as likely to do so again.
- Total herd size: above a threshold of eight to nine cattle, farmers were able to increase herd size. Those below this threshold number showed little progress.
- Farmers who had never killed a heifer were more likely to be successful.

Additional but less significant factors¹⁵ included resisting requests for cattle for *fa'alavelave*, owners personally caring for their cattle and success with the total herd. That is, success with DAFF project cattle followed a similar pattern to the whole herd (when maintaining numbers is counted as success). Surprisingly, neither the length of time cattle farming nor absentee owners (i.e. absence from the village) was found to be significant in the general survey, although length of time cattle farming was significant in Sato'alepai in 1994 (see Figure 6.1).

But was success (or failure) maintained between 1987 and 1994? Were the same farmers consistently successful or unsuccessful across the columns B, C and D of Table 7.5? While 42% were consistently successful and 17% were consistently unsuccessful, 41% had mixed success. This, then, makes it very difficult to identify the characteristics of a successful smallholder cattle farmer although their previous track record, particularly those who have failed badly, does have some predictive value. Apart from those variables listed above, statistical tests have failed to identify other characteristics. Successful cattle farmers are not necessarily young or old, *matai* or non-*matai*, educated or uneducated, a villager or in another occupation, urban-based or rural. There are so many variables all 'varying' in any one case it is impossible to determine cause and effect statistically.

Figure 7.4: Representations of the Histories of Three Herds



The observations in Chapters 5 and 6 however, suggest that many variables could contribute to the success or otherwise of a herd. We have previously concluded that groups are particularly unsuccessful in the long term although they may have a valuable short term role. Another factor is major life events. These include death of the owner, death of the owner's parents or spouse, emigration and change of ownership of the herd which is often a consequence of a major life event. The final important factor is herd size.

7.3.4 Other Measures of Success

Numbers are not necessarily the only measure of success. A second measure of success could be the entry of new cattle farmers into the field and widening distribution of cattle among village households. That is, their popularity. The Department of Agriculture "noticed with interest the number of people without previous experience in cattle keeping [who] had applied [for cattle]" (Department of Agriculture, Forests and Fisheries, 1993/94:38).

This research recorded the widening distribution of cattle in Sato'alepai. In 1987 only 12 out of 24 households (50%) had cattle. In 1994 a surprising 22 households (92%) had cattle. A much lower figure had been anticipated given the supposed 'failure' of cattle projects. Such is the popularity of cattle that the remaining two households without cattle also expressed the desire to have them.

A third criterion of success is, of course, the perception of success by farmers themselves. In Sato'alepai 62% of cattle farmers considered themselves successful cattle farmers, 19% did not and 19% were not sure. The village cattle farmers of Sato'alepai defined success in terms of obtaining a good income from cattle to be able to purchase such things as a motor vehicle or outboard motor, build a better house or pay their children's school fees (42%). Twenty-seven percent described success as having good pasture, fencing, water supply and a stockyard, and 24% considered success to be increasing one's herd size. It was surprising that contributing to *fa'alavelave* was not used to answer this question. That it was not, indicates that farmers clearly separate the roles they give to cattle and rather than having mixed goals they have multiple goals that run in parallel.

A fourth measure is increasing competence:

"There was a marked increase in the response from farmers in accepting the advices (sic) given. This was shown by the interest and the actual practices of planting improved pastures; the concern for ensuring good water supply; upgrading of fences and the general maintenance in the cattle farms" (Department of Agriculture, Forests and Fisheries, 1993/94:37)

Again this is consistent with the research findings described in Chapter 6.

7.3.5 Explaining the Turnaround

Based on the decline in numbers recorded in 1987, I had returned to Samoa in 1994 expecting to find further decline or little growth in cattle numbers. What accounted, then, for the dramatic turnaround?

First was the commitment by the Samoan government to increasing cattle numbers even when aid partners were giving up. Aid partners had equated the decline of WESTEC with the whole cattle industry and had also used Samoan culture and *fa'alavelave* as an excuse to pull out (Misa Telefoni, pers. comm., 1994). Consequently the government imported 1,400 cattle, mostly female breeding stock and mostly Droughtmasters, from Queensland in late 1993 at a cost of 1.7 million Tala, funded entirely from GOWS funds (Misa Telefoni, pers. comm., 1994).

Larger herds of about 15 cows and a bull were distributed to farmers. To receive them farmers had to pay a 20% premium above market price which was refundable if the cattle were still alive after two years. A stockyard was now also a prerequisite (advice on how to build one was available) in addition to land, fencing, pasture and water. Although these three factors potentially limited access to those who were better off, the Minister of Agriculture, who I spoke to in 1994, was encouraged by the amount of discussion and even controversy generated by this recent shipment. The shipment had sold out fast and a second one was planned.

The Minister, the driving force behind the importation and a cattle farmer himself, was very enthusiastic about cattle and had the respect of farmers. He contributed to radio programmes

about cattle farming and started a Samoan Cattle Farmers Association. Several respondents had joined it and enjoyed the status it conferred. The Minister had also established a Livestock Taskforce that met regularly. With members from across the Department of Agriculture and aid agencies, its job was to recommend future directions for development of the cattle industry. I attended one meeting and was able to offer some suggestions.

A second contributing factor was that Livestock Section staff, who had seen projects and project staff come and go, had remained remarkably stable and very committed. Thus the loss of knowledge that often occurs with rapid staff turnover had not occurred. A good veterinary service had helped relations between farmers and staff. Third was the cessation of the Brucellosis Eradication Programme which had been having a severe impact on cattle numbers due to the culling of positive reactors. Fourth was the rise in popularity and importance of cattle within Samoan culture which was examined in Chapter 5. Fifth was the profitability of cattle and their usefulness in difficult times. This was examined in Chapter 6. Although impossible to measure, it appears that the rise in cattle numbers closely correlates with the incorporation of cattle into Samoan culture and livelihoods.

Sixth was time and the reaching of a threshold level of numbers, herd sizes and experience in the village sector. Parker (1980:30) identified herd size as a critical factor and a threshold of seven cattle. In 1987 a threshold level of eight or nine cattle, above which farmers were able to continue to successfully increase their herd size, was identified (Maiava, 1993:251). The data collected in 1994 again identify this threshold as significant and important. Although length of time farming cattle was not significant in 1987, collective experience did appear, when combined with the herd size threshold and the rising popularity of cattle, to be an important factor in 1994.

7.4 Analysing the Assumptions: Are They Really Myths?

The survey of development literature relating to the development of the smallholder cattle industry in Samoa examined in Chapter 3 identified six specific assumptions about farmer behaviour. These were:

1. Samoan cattle farmers do not understand the commercial value of their cattle
2. They farm cattle primarily for *fa'alavelave*
3. The majority of cattle slaughtered are for *fa'alavelave*
4. They do not discriminate when choosing which animal to slaughter for *fa'alavelave*
5. They kill the breeding stock (heifers and cows) for *fa'alavelave*
6. They choose the largest or 'best' animals for *fa'alavelave*

These assumptions can now be individually refuted.

1. Samoan farmers do not understand the commercial value of their cattle.

In 1987 farmers in the general survey were asked to estimate the monetary value of a three year old bull or steer, and a heifer or breeding cow. The responses were not suggested to farmers. Valuations for bulls are shown in Table 7.7.

Table 7.7: Respondents' Valuation of Bulls

Values for a bull (<i>Tala</i>)		% of respondents
\$1,200-\$1,350	(Slightly overvalued)	7
\$1,000-\$1,100	(Correct)	46
\$750 - \$900	(Slightly undervalued)	17
Below \$700	(Wrong)	17
Did not know	(including caretakers)	13

Source: Fieldwork, 1994.

Respondents valued their stock on a market or commercial basis. Forty-six percent of respondents had a very accurate knowledge of the value of their bulls. A further 24% had a pretty good understanding of their value. That is, a total of 70% of respondents had a good understanding of the commercial value of their cattle. It must also be remembered that some of those who did not know were caretakers who might not have been involved in buying or selling cattle.

Ninety-two percent of farmers also valued heifers and breeding cows at a level about \$200 below bulls and 8% valued them at about the same value as bulls. This indicates that farmers

also value female breeding stock on a weight basis, that is, on the same basis that breeding stock are sold to them by DAFF, and the basis they can sell to the butcher. They do not assign a monetary value to their breeding value, probably because DAFF do not either and this has influenced their conception of the value of their cattle. However, heifers are valued above bulls in other ways as we will see below, which indicates that farmers will make short-term, financially unwise decisions in order to preserve breeding stock as a long-term investment.

2. Farmers farm cattle primarily for *fa'alavelave*

There is quite a range of variation in response to this assertion. The first conclusion is that it is not possible to generalise. Although 5% of respondents farmed cattle exclusively for *fa'alavelave*, 14% never contributed cattle to *fa'alavelave*. Most, however, farmed cattle for both cultural and commercial purposes. Chapter 6 revealed the multiple roles assigned to cattle and their utility in being able to be used this way. It has been revealed that *fa'alavelave* do provide motivation for cattle farming for many farmers, although the incorporation of cattle into *fa'alavelave* provides stresses as well as rewards. It cannot be concluded that farmers farm cattle primarily for *fa'alavelave*, but rather that cattle enable them to manage multiple priorities.

3. The majority of cattle slaughtered are for *fa'alavelave*

Again there is considerable variation here. This thesis is unable to provide accurate proportions relative to the use of cattle for income. However, 63% of respondents estimated that they sent more cattle to the butcher than to *fa'alavelave* while 33% estimated that they contributed more cattle to *fa'alavelave* than they sent to the butcher. In Chapter 5 it was calculated that farmers contribute an average of three cattle to *fa'alavelave* each per year, although the median was one beast per farmer every nine months. That is, in 1994, the majority (57%) of farmers contributed one beast to *fa'alavelave* every nine months on average (see Tables 5.2, 5.3 and 5.4). Use of cattle for income varies considerably and is not regular.

4. and 5. Farmers do not discriminate when choosing which animal to slaughter for *fa'alavelave*. Farmers kill the breeding stock (heifers and cows) for *fa'alavelave*

Heifers and cows were actively not selected for slaughter, more so in 1994 than in 1987, and probably more so than in previous years. Views about killing heifers may have been partly justified in the past but should no longer be held as most farmers have responded to the messages and initiatives to avoid killing heifers and cows. Evidence from Chapter 5 and the 1989 Agricultural Census discussed below support this argument. Assumptions 4 and 5 will be refuted further below.

6. Farmers choose the largest or 'best' animals for *fa'alavelave*

Contrary to this assertion, this research found no evidence of farmers selecting the 'best' animal for *fa'alavelave*, however 'best' was conceived. As long as cattle were of a reasonable size, size was not a deciding factor. Indeed farmers would, if they could, get away with killing a smaller animal.

There is also a contradiction between assumptions 4, 5 and 6. A farmer cannot do any one without negating the others. That is, a farmer cannot a) not discriminate, b) choose a heifer, and c) choose the 'best' animal (presumably a large bull), simultaneously.

The six specific assumptions refuted above also indicate more fundamental beliefs as outlined in Chapter 3. The first is the assumption that *fa'alavelave* are the problem, that is, one of the main reasons why the smallholder cattle sector is failing in Samoa. The second assumption is that *fa'alavelave* have no modern value and third is the assumption that farmers slaughter indiscriminately and female cattle are killed without regard to their reproductive or investment value (Maiava, 1993). Following the examination of *fa'alavelave* and the role of cattle in them, it is now possible to assess the validity of these assumptions.

Such views, as previously stated, are not empirically research based, but echo the prevailing paradigm that interprets cultural activities as constraints on development, Samoans as traditional and resistant to change, and does not credit farmers as being active rational decision-makers. These broad assumptions can also now be refuted.

1. *Fa'alavelave* are the problem.

In Chapter 3 it was argued that the inclusion of cattle in these traditional exchange ceremonies is believed to be probably the most significant obstacle to the development of a smallholder cattle industry; one of the major reasons, if not the main reason, why cattle numbers in the smallholder sector were thought to be static or declining. However, previously in this chapter it has been shown that the smallholder cattle industry in Samoa has shown consistent growth and that the farmers in this research were succeeding. In other words it is argued that, when a longitudinal time frame is taken, there may not even be a problem. It has been suggested that an equilibrium has been established after an extended learning process, and once thresholds of cattle numbers and knowledge were achieved.

That *fa'alavelave* are not the problem has been demonstrated by the empirical evidence in Chapter 5. The impact on smallholder herds is decreasing even while the contribution of cattle to *fa'alavelave* is increasing. In the seven years from 1987 to 1994 the average herd size among all respondents (including those who had no cattle left) rose from 13 cattle to 25 cattle. In that time 59% of respondents increased the size of their herd and the number of cattle rose 66%.

But further evidence that, if there are problems, *fa'alavelave* are not significant amongst them is gained from analysing what else happens to cattle. Data from respondents in 1987, regarding a total of 308 project cattle received from DAFF on average 16 months previously, showed that within that time 23% had been lost and only 77% remained (not counting any calves born). These data are shown in more detail in Table 7.8, along with directly comparable data from Parker (1980).

Table 7.8: The Fate of Project Cattle

The Sample	Parker 1979	Maiava 1987	Maiava 1987 Adjusted
Sample size	199	64	21
Av. months after receiving cattle	21	16	21
Total number cattle received	818	308	119
Total number heifers received	677	234	91
Gains*			
Calving Rate			
(% heifers with live calves)	21	18	31
Increase as % of total herd	18	14	24
Losses*			
% of original cattle remaining	68	77	72
% slaughtered - butcher	} 23	2.0	2.5
- <i>fa'alavelave</i>		2.0	4.0
- escaped and shot		2.5	2.5
		} 6.5	} 9
% died (injury/calving/disease)	3.5	3.5	4.0
% missing - stolen	} 5.5	5.5	4.0
- abandoned		4.5	8.5
- escaped and alive		3.0	2.5
		} 13	} 15
Total % loss (original cattle)	32	23	28
Total Remaining (%)			
(Total received - losses + gains)	86	91	96

*All progress figures in Table 7.8 are percentages

Sources: Parker (1980:28-31), Maiava (1993:253); Fieldwork 1987.

Many issues are raised by these data but the important figure here is that only 2-4% were contributed to *fa'alavelave* in 16-21 months. These cattle were under contract and the

owners subject to penalties¹⁶ if the cattle were slaughtered, so this figure is lower than would otherwise be, but it is very low and certainly indicates that *fa'avelave* were not a major problem. Table 7.8 shows that escaping, stealing, abandonment and injury were each more significant than *fa'avelave*.

2. *Fa'avelave* are of no value.

The second broad assumption is that, even if they are not a constraint, *fa'avelave* are of no use, they waste resources and occupy time that could be more profitably spent in productive activity. They have no positive role to play in a modern Samoa and it would be best if they were stopped. An example illustrating this thinking is the costing of heifers contributed to *fa'avelave* as losses at market value in a cost-benefit analysis of a heifer retention scheme by Lincoln International (1991b:Appendix 2).

However, the argument of this thesis is that, in addition to the value of *fa'avelave* described in Chapter 4, cattle are important in *fa'avelave* because they allow for the distribution of quality protein (Read, 1997) in a diet that is protein deficient (Chief nutritionist, pers. comm., 1987). Sixty percent of protein foods are imported (Christine Quested, pers. comm., 1994). Other major sources of protein are either in rapid decline, such as fresh fish (Government of Western Samoa, 1992:20) or of lower nutritional value, such as fatty mutton flaps (Sio, 1996) and tinned corned beef (Pacific Islands Heartbeat, 1995). While protein is not of particular concern to nutritionists in Samoa, the increasing consumption of fatty foods and processed foods of poor nutritional value is (Christine Quested, pers. comm., 1994; Savou, 1996; Sio, 1996), even more so because taro has been lost to the diet. Increasing beef consumption would, in addition to vegetables, offer a more healthy substitute.

Without adequate refrigeration in villages, beef must be quickly and widely distributed and many people benefit. Ninety-three percent of respondents had received beef from *fa'avelave* within the previous six months. A very high rate of 24% had received beef within the last week and 58% within the last month. While 14% of this beef was consumed within one household, 83% was distributed among more than one household including extended family, neighbours and workers as is still very much the custom in Samoa. In this sense cattle projects are at least partly successful even if profit is not maximised. Any

income from the sale of an equivalent carcass could not re-purchase and distribute the same quantity and quality of protein so effectively.

It was noticeable during fieldwork in 1994 that there had been a marked increase in the number of refrigerators and freezers, including large chest freezers in homes. Thirteen percent of respondents reported freezing beef they had received from *fa'alavelave*.¹⁷ However, it is doubtful that freezers will greatly affect the distribution of beef from *fa'alavelave* because of the strong cultural tradition of sharing both food and sudden windfalls. In addition, those who contribute to *fa'alavelave* must receive a share of the exchange no matter how far down the chain they are.

Most of the beef (70%) was consumed as *supo*, 18% was used for both *supo* and steak, 6% was eaten as steak and 6% was roasted. For *supo* the meat is cut up into very small pieces, boiled, and mixed with vegetables and noodles in a Chinese style soup.

When I asked respondents about receiving beef from *fa'alavelave*, it invariably caused them to laugh. We had been talking about giving to *fa'alavelave* which they had been discussing very seriously but this suddenly broke that tension. Giving (and being seen to give) is more important than receiving in Samoan culture because generosity wins praise and is a source of status. It also requires serious calculation and decision-making. Receiving, on the other hand, is almost incidental.

3. Farmers kill the heifers.

The third broad assumption is that the female breeding stock, the most important animals for increasing cattle numbers, are slaughtered indiscriminately for *fa'alavelave*. Farmers do not manage or plan, only choosing the best for today's need while giving no thought to the future. That is, they do not discriminate and do not behave rationally.

This thesis has uncovered considerable evidence to contradict this assumption. In addition, evidence from other sources also supports this finding. There is consistent evidence from the village survey of Sato'alepai and from the 1989 Agricultural Census that female stock outnumber male stock. This should be expected because DAFF distributed stock in a ratio of approximately 4:1 heifers to bulls. So herds were initially approximately 80% female to

20% male for our purposes. But these stock went into herds that it can be assumed were 50:50 and the offspring would be in the ratio of 50:50. Thus over a period of several years the ratio of females to males can be expected to decline.

In Sato'alepai there were 95 cattle: 13 bulls and 60 adult female stock. That is, 22 were heifers, 36 were breeding cows (a total of 58 female breeding stock) and 2 were old cows. 22 of the herd were young stock, presumably 50:50 females:males. Thus the overall ratio of females to males was 71:24 or 3:1. Farmers told me that they select bulls for slaughter and these figures show that they do.

As stock came from a variety of sources in a variety of combinations it is not possible to realistically measure change over time in Sato'alepai. However, this can be attempted for the general survey where stock were received in the average proportion of approximately 4:1, but so long ago that a 1:1 ratio would be expected now. In 1994, of 1,290 cattle, 560 were breeding cows or heifers, 303 were calves and 427 were bulls, steers or old cows. Assuming the calves were evenly split, the ratio of female breeding stock to male stock and old cows was 55:45. If it is assumed old cows make up 5% of the numbers, the ratio of female to male stock is 3:2. This ratio is not as high as in Sato'alepai but certainly suggests that the killing of female stock is actively avoided.

In addition, the 1989 Census of Agriculture recorded the number of female and male stock in the smallholder sector. The effect of distributions of female stock by DAFF will be small here as the numbers of cattle distributed (say 1,400 or 200 per year over the previous seven years, the assumed average life of a beast after distribution) will have only a small influence on the composition of a national herd of 24,096, or the smallholder herd of 13,431. A ratio close to 50:50 would be expected if farmers made no distinction when slaughtering.

Table 7.9: Numbers of Cattle (Female and Other) in the Household and Non-Household Sectors

	Household		Non-Household	
	Sector	%	Sector	%
Total number of cows	7,071	53	5,763	54
Total number other cattle	6,360	47	4,902	46
Total number all cattle	13,431	100	10,665	100

Source: Department of Statistics/Department of Agriculture, 1990:25, Summary of Results

We can see from Table 7.9 that in the household sector 53% of cattle were cows, and in the non-household sector 54% of cattle were cows. That is, there is no significant difference between the record for the village and government/private sectors based on these figures. In other words there is no evidence to suggest, on the basis of the female:male ratio, that the village sector is any less successful than the government/private sector.

Table 7.10: Numbers of Cattle in the Household Sector

	Cows	Bulls	Other Cattle	Any Type of Cattle
Apia Urban Area	316	160	167	643
North-West Upolu	600	272	315	1,187
Rest of Upolu	3,083	1,559	1,114	5,756
Upolu	3,999	1,991	1,596	7,586
Savaii	3,072	1,680	1,093	5,845
Western Samoa	7,071	3,671	2,689	13,431
%	53%	27%	20%	100%

Source: Department of Statistics/Department of Agriculture, 1990:34, Table 5.7

In the household sector 53% of cattle were classified as cows, 27% as bulls and the remaining 20% as other cattle (mainly young stock) (ibid:35). If we assume 4% were steers, and a 50% split between cow and bull calves (i.e. 8% each), and add together 53% cows and 8% cow calves then we can see that the proportion of female stock is at least 60% and male stock 40% or lower or, as this research also found, a ratio of 3:2.

Other evidence that female cattle are positively favoured has already been given in previous chapters. In Chapter 6, Table 6.1 showed that while 93% of households with cattle, have cows, only 64% of households with cattle, have a bull. This strongly suggests that cows are favoured, and further, that bulls in these households may have been contributed to *fa'alavelave* in preference to cows, even if it was the last bull. In Chapter 5, Table 5.11 showed that in 1994 data from this research found that female breeding stock were contributed to only 16% of *fa'alavelave* and made up only 13% of cattle killed for *fa'alavelave*. Furthermore, it was found in Section 5.3 that farmers made deliberate choices to avoid killing breeding stock for *fa'alavelave*: 95% of respondents said they would choose a bull or old cow rather than female breeding stock when choosing cattle for *fa'alavelave*.

We can conclude that there is absolutely no evidence that 'they kill the heifers' and certainly evidence to suggest that killing female stock is actively avoided. It is not denied that at one time female stock probably were slaughtered more frequently. In the beginning farmers did not realise that cattle multiplied much more slowly than pigs, for that was their experience. The high subsidy was also a factor. In addition the slaughtering of breeding stock was and is encouraged by a fault in project design. Farmers, who were very aware of the monetary value of their cattle, consistently valued heifers at a lower price than bulls, basing their value on weight or carcass value rather than reproductive value, because the cattle were sold to farmers on a weight basis. Thus the wrong signal was sent to farmers from the beginning; heifers should have been priced more highly based on their reproductive value.

The killing of heifers is not a common practice. In 1987, 53% of respondents had never killed a heifer, 39% were more reluctant to than in the past, while only 8% were still willing. Farmers, as well as DAFF, have gone through a learning process. Reference back to Table 5.11 shows the dramatic change in behaviour between 1987 and 1994. This was also being recognised by project personnel. In 1994 a senior FAO official acknowledged to me that the slaughtering of heifers was a thing of the past (Jaap Meijer, pers. comm., 1994).¹⁸

7.5. Conclusion

A number of significant conclusions can be drawn from the analysis in this chapter. It is clear that not only are *fa'alavelave* not a problem in the growth of the smallholder cattle sector but also the assumption that there is a significant problem can be challenged when different perspectives are adopted. A longer perspective is required. Cattle projects in Samoa have taken a fluctuating path to reach an equilibrium and, in parallel with this, a learning process has occurred. This has also been a fair test of culture as an obstacle or constraint to development. It was hypothesised at the beginning of this chapter that if culture were a constraint then farmers would not succeed with cattle. However, farmers have succeeded and shown that Samoan culture is not a significant long-term obstacle to smallholder cattle farming. Although cultural factors may slow down its development, in the long-term the results have been found to be more sustainable.

If there have been problems they have been in the areas of project planning and management in the government and quasi-commercial sectors (WESTEC). It was not recognized that smallholders were not necessarily having the same problems or facing the same 'crisis' as the government farms or WESTEC. Smallholder cattle farmers were virtually ignored, or neglected, relative to the investments made elsewhere. The evidence here, however, shows that smallholders are just as viable, if not more viable, than large (non-private) commercial concerns. While cattle development personnel were focused on other areas farmers were succeeding unnoticed, increasing cattle numbers and farming cattle for their own purposes on their own terms. Objections to *fa'alavelave* and farmers' assumed non-commercial behaviour, then, becomes a non-issue.

Furthermore, assumptions made by development practitioners about the role of Samoan culture, and *fa'alavelave* in particular, in the development of the smallholder cattle sector, have been found to be grossly misinformed. This raises important issues. How could those who made those assertions have got it so wrong? How could their accepted wisdom have remained unchallenged for so long? These questions will be addressed in Chapter 8.

¹ Taro was severely hit by a blight in 1994 that destroyed 95% of the crop and had continuing repercussions. Consequently, the World Bank figures quoted no longer apply to taro. The upturn in taro production in the late 80s and early 90s when the prices rose is, however, another phenomenon that supports the market price hypothesis.

² To many authors cattle are still invisible. For example, Gage (1986), in describing the 'flora and fauna', in the context of resources available to Samoans, does not record cattle but only that three domesticated animals are kept: pigs, chickens and dogs (Gage, 1986:35). Cattle are less visible from the road, usually being kept deep in plantations, unlike pigs, chickens and dogs which live closer to housing.

³ Although this argument remains valid, I have been advised that tropical pasture should be grazed at higher height levels than temperate pasture; levels which leave coconuts still partly or wholly obscured. (Bill Pattie, pers. comm., 1994).

⁴ A significant hide based industry has not become established and due to the importation of brucellosis and its spread among the national herd, beef from Samoa cannot be exported. Although there is a canning factory in Samoa it cans imported (brucellosis free) beef. A parallel dairy industry has also failed to become established.

⁵ The description of a livestock project in an anonymous South Pacific country given the name 'Rabona' (Love, 1979) has many parallels and could be describing this project but the author, who I asked personally, was unable to recall which country he had written about.

⁶ Mintweed (*Hypytis capitata*) and other weeds are suspected of having been imported with aid cattle as well (AIDAB, 1987:9).

⁷ This thesis accepts the data from the Agricultural Census as being the most accurate available. The author was in Samoa at the time it was conducted and observed the efforts made to be as accurate as possible.

⁸ The Government wishes to reduce this practice by setting up a national abattoir - but transporting live animals remains a problem for farmers. It argues that as well as improving hygiene standards, an abattoir would allow use to be made of wasted by-products such as hides, and more importantly "discourage cattle theft which is at present a significant disincentive to producers" (Government of Western Samoa, 1992:71).

⁹ The WESTEC herd was already declining, from over 8,000 in 1985 to 7,129, or 30% of the national herd, in 1989 in the agricultural census.

¹⁰ While data in columns A, B and D of Table 7.5 are based on actual cattle numbers, the data in column C are based on farmer estimates and may be slightly exaggerated.

¹¹ An additional five respondents traced did not have cattle in 1987 and had not started again. As they could no longer be considered cattle farmers they were not included in the analysis here.

¹² Where recently imported Droughtmasters were known to have been added to the herd, these were excluded from the count.

¹³ 64 respondents in 1987 had 816 cattle (see Table 7.6). The apparent discrepancy arises from those who were not traced in 1994 or were deleted because they had no cattle in 1987 and did not start again (see footnote 11).

¹⁴ At a 95% level of confidence.

¹⁵ Not statistically significant at a 95% level of confidence but only just missed out.

¹⁶ I was not aware that monetary penalties were ever enforced. DAFF officers preferred reasoned persuasion.

¹⁷ I would estimate that perhaps half of all homes had some form of freezer. Most were used to store boxes of imported frozen lamb flaps or chicken pieces. But it is only a small jump to storing home killed meat. Although freezers are unlikely to affect the distribution of beef after *fa'alavelave* to a great extent, they could make killing for home consumption, not currently done because of the size of a beast, more common.

¹⁸ There is also a fourth assumption: the belief that Samoan agricultural production has remained communally based. This has led to recommendations that cattle be farmed communally. This assumption was found to be incorrect in Chapter 6.

Chapter Eight

Conclusion

This chapter, the concluding chapter of this thesis, locates this research in context, summarises the findings and returns to the larger picture. It locates this study in research on cattle farming in Samoa and the Pacific, in development projects, and in social research, particularly of social change in Samoa. While the findings have supported and paralleled recent anthropological studies of social change in Samoa, it has not supported assertions found in agricultural and cattle project documents about the role of Samoan culture, particularly *fa'alavelave*, in smallholder cattle farming. Rather it is concluded that these assertions were incorrect.

The reasons why the latter group of writers were misinformed is discussed and is traced to blind-spots in the dominant development paradigm. It is argued that a new theory of development which can more accurately account for and predict development as a process of cultural interaction and negotiation can be formed. It is suggested that the motives for endogenous development are rooted in four psychological needs which become apparent when two cultures meet and clash.

8.1 Locating this Research in Cattle Projects in Samoa and the Pacific

This research is the first attempt to study cattle farming in Samoa from anything other than a technical viewpoint. It is the first time an empirical study of cattle farming and the use of cattle in Samoan cultural activities has been carried out. It is the first time Samoan cattle farmers have been asked how they view, farm and use cattle, and their perspective specifically sought. Therefore it adds a new perspective to understanding smallholder cattle farming in Samoa.

In this regard it is also relatively unique to the study of smallholder cattle farming in the Pacific. Other accounts of cattle projects in the Pacific include Philipp et al. (1975) on the Papua New Guinea cattle industry, von Fleckenstein (1975) on one cattle project in Papua New Guinea, McKillop (1976) also regarding a cattle introduction programme in Papua New Guinea, a study of a cattle project in the anonymous Pacific country of 'Rabona' by Love (1979), a study of two beef cattle projects in Fiji (Ravuvu, 1988b) and McKillop's (1989) survey of village beef cattle development in Melanesia. There are also many official assessments of other Pacific cattle projects such as the Asian Development Bank (1985c) in the Solomon Islands and technical documents such as Macfarlane et al., (1991) regarding management of technical issues of cattle development in Vanuatu. Videos have also been produced by AIDAB on the pasture improvement programme in Vanuatu (AIDAB, nd.a,b,c).

These are all valuable evaluations and contributions to the literature and some do attempt to assess the events described from the perspective of the participants (eg. Ravuvu, 1988b). However, none specifically seek the perspectives of smallholder cattle farmers or take an empirical approach to gaining that perspective. Many focus on infrastructural, administrative and technical difficulties and try to deal with the frustrations of lack of control by imposing more control.

Many of the technical lessons regarding pasture and the management of tropical breeds learnt from experience in Vanuatu and the Solomon Islands (Macfarlane et al., 1991; AIDAB, nd.b,c) are of value. These lessons are being transferred to Samoa by the Australian consultants GRM who have extensive experience in smallholder cattle development in Melanesia.

However, from these accounts it can be seen that there are differences in the nature of the projects in Samoa and elsewhere which make them and their outcomes less comparable and more difficult to generalise from. Negative outcomes in the two Fijian projects described by Ravuvu (1988b) for example, are attributed to excessive control by project managers of farmers who had virtually no control over decision making or their own finances, and to excessive debt. McKillop (1989) also identified excessive debt as a problem that cattle farmers in Melanesia found almost insurmountable. In contrast, Samoan cattle farmers were largely left alone and had particular freedom to farm and dispose of their cattle as they chose. Debt was not a major constraint.

Nevertheless it is possible to identify a number of similarities with McKillop's (1989) account of cattle programmes in Melanesia. One was the difficulty with escaping and wild cattle. Feral wild cattle became such a problem in Papua New Guinea that the use of a helicopter to shoot them was requested as a development project (ibid:16).

Another similarity was the orientation towards and preference for commercial production which drew support and funds away from the smallholder sector. This bias was exacerbated by apparent failure: "dramatic swings in policy orientation [occured] ... as smallholder cattle came to be judged as a 'failure' ... local officials and aid donars alike ... sought to discard cattle and seek 'success' elsewhere" (ibid:26).

A significant similarity is the sequence of phases from rapid expansion and optimism through to problems emerging, disillusionment and a reduction in aid, and finally reaching an equilibrium after 'failure'. McKillop found this in Papua New Guinea, the Solomon Islands, Vanuatu and Fiji. Finding the same pattern in Samoa suggests that this is probably a very common pattern in the outcomes of development projects. McKillop also stressed the need for a long-term perspective: "a major new innovation, such as cattle, may require at least a generation before the necessary adaptations to the farming system are firmly in place" (ibid,26).

Probably the most significant similarity however, is the influence of cultural factors and the interpretation of unexpected culturally-based responses as 'failure'. McKillop could have been writing about Samoa when he concluded:

"The influence of social factors on village cattle development programs dominates the Melanesian experience. In short, cultural values and social relationships meant that outcomes were very different from those envisaged by program planners (p26) ...Although official perceptions of smallholder cattle rearing now tend to highlight 'failure', evidence suggests that this is an over-reaction. Gradually beef cattle have gained acceptance as an important component of smallholder farming systems (p19)" (McKillop, 1989)

The Samoan experience of this, then, is far from unique, and suggests the findings of this research can have wider applications. The question becomes: how did the planners and

development practitioners in Melanesia and Samoa manage to misinterpret what was happening at the project-people interface?

8.2 The Findings of This Study

In summary, the central purpose of this thesis was to determine whether there are rational explanations (while acknowledging the post-modern pluralist possibility of multiple rationalities), based within Samoan cultural and social values, for cattle farming and utilisation behaviours that have been characterised as irrational in project literature. That is, to determine the validity and credibility of common Western perceptions and interpretations of Samoan cattle-farming smallholders by examining the role and incorporation of cattle into Samoan culture, society, livelihood and farming systems. Finally, it was to investigate the theoretical origins and implications of any misinterpretations found.

In Chapters 5, 6, and 7 common Western interpretations were found to be grossly misinformed. What were assumptions have been found by this study to be myths. Samoan behaviour has been found to be rational, sensible and pragmatic in the context within which Samoans live.

In Chapter 5 it was found that Samoans are incorporating cattle into *fa'alavelave*, and more frequently, especially to funerals. However, although this might seem to be having a detrimental impact on cattle herds, it was actually found to be sustainable because the percentage of herd contributed per *fa'alavelave* was significantly decreasing and herd sizes were markedly increasing. Furthermore, the contributing of cattle to *fa'alavelave* was found to be a caring practice, motivated primarily by love and commitment to family (including the upholding of family status in the community).

Fa'alavelave were used to test a key issue: whether traditional customs are constraints to development. In this case *fa'alavelave* were not found to be a constraint to the development of the smallholder cattle sector and instead were found to provide a motivation for cattle farming. By extrapolation and use of Popper's concept of falsification (Popper, 1959), it can no longer be argued that traditional behaviour is a constraint to development. This does not mean that it is never a constraint, but that it is not a universal constant and cannot be assumed. Any theory that makes the assumption that traditional cultural values and behaviours are a constraint to development must be re-examined.

In Chapter 6 the interaction between cattle and people, and their mutual impact was considered. It was found that cattle have a range of utilities for both traditional and modern purposes and help facilitate some of the modern changes Samoans want to make such as individual ownership of property. That is, people want to modernise but within a cultural context. Rather than the strict dichotomy between the traditional and the modern established by modernisation theory, this thesis found considerable blurring and negotiation between them. Modernisation is happening spontaneously (due to diffuse, indirect Western influences), again leading to the conclusion that Samoan culture is not inherently conservative.

Cattle were found to reflect and parallel other social change in Samoa. With regard to research on social change in Samoa this research confirms previous research (Pitt, 1970; O'Meara, 1986,1995) related to changes in land tenure, farmer responsiveness to prices and markets, the relationship between Samoan culture and development, and change and development. These studies, like this research, were based on extended and detailed field-based research and contradicted previous assumptions.

A number of similarities or parallels between cattle farming and changes to land tenure were identified in Chapter 6. These included the justification of changes as traditional when, in fact, both were related to social change and increasing individualism. Both maintained urban involvement in rural activities and were interrelated when land was cleared for cattle farming and cattle used to claim ownership of land. However, this latter relationship should be clarified by further research as most cattle are farmed under coconuts and probably only a small proportion of cleared land is used for cattle farming.

There are significant ways Samoan culture and society influence the way cattle are farmed and utilised which are contrary to the way they might have been 'supposed' to be farmed (as a single profit-making enterprise, or at least within the farming system with the owner being the primary carer). Instead, cattle have been incorporated into a diverse income-generating strategy for both urban and rural-based owners and their families. Cattle have been incorporated into not just the Samoan farming system but also into the family livelihood system which includes non-rural sources of income.

The influence of living in a MIRAB economy and the detrimental impact of emigration on cattle herds was found to be an important factor impacting on cattle farming. This was more

significant than the influence of remittances as, surprisingly, remittances from family members overseas did not play a major direct role in funding cattle farming.

Finally, Chapter 6 found that cattle farmers were active in not only adopting cattle but also adapting them to their farming and livelihood systems, utilising them to meet their own culturally determined needs. An example where Samoan farmers have adapted cattle for their own purposes is the use of cattle as walking banks. Again the motive of supporting the family was more important than the profit motive. Farmers have also been innovative in coping with and improving on an imperfect technology, for example by learning to tame wild cattle. They have been through, and are still going through, a learning process. Whatever farmers do with cattle, Chapters 5 and 6 showed that it was rational and pragmatic in the cultural and livelihood contexts within which Samoans live.

In Chapter 7 it was found that the success farmers were having with cattle had been seriously underestimated and that over a longer time-frame smallholders were being successful. Furthermore, smallholders were found to be no less efficient than the plantation quasi-commercial (government-owned) mode of cattle farming. Unfortunately the success smallholders were having was not distinguished from the difficulties faced in other sectors where attention was focused. If all the investment into WESTEC were taken into account, smallholders would undoubtedly be found to be more efficient in the long-term. However, development practitioners, like the farmers, also went through a learning process during that time.

Chapter 7 examined and exploded the specific myths about cattle farmers found in an examination of project literature in Chapter 3. It was concluded that *fa'alavelave* were not a significant problem (especially relative to other factors such as brucellosis, low fertility, emigration and stealing), that they provide a motivation (along with modern objectives) for cattle farming, and that they had both traditional and modern utility. Finally, the specific myth that farmers slaughter female breeding stock, whether deliberately or not, for *fa'alavelave* has no basis at all. Instead it was found that smallholders make deliberate decisions to preserve female stock. The assertions in the literature were not supported. The validity of common Western perceptions was questioned and found wanting.

In contrast to what was expected by the literature, as described in Chapter 3, the development observed in Samoa with respect to cattle has been endogenous: an active and

interactive dynamic process of perception of opportunity, response to, and negotiation with, external intervention, and where culture has not been constraining but motivating. And, in a longer time-frame, smallholders were being successful. The development practitioners had been grossly misinformed.

Wider comparisons can be made with other development projects that have also 'got it wrong'. Chambers (1997:15-32) gives several examples of development efforts in which errors have become embedded and perpetuated, concluding:

"Embedded errors go deeper, last longer, and do more damage. Often they reflect widely held views, and are generalized. Often they fit what powerful people want to believe. They tend to spread, to be self-perpetuating, and to dig themselves in. Embedded error proliferates and sustains failures (p15-16) ... Errors and myths have persisted through decades, reinforced and reasserted by intelligent, highly educated people across the range of disciplines and professional occupations (p29)" (Chambers, 1997)

The question then arises: how did such errors originate? How could those involved with cattle projects in Samoa continue to believe that Samoan culture was a major constraint to smallholder cattle farming and that smallholders were not being successful?

In Chapter 3 it was argued that these views were perpetuated because of expectation, selection, repetition and an over-reliance on secondary literature instead of empirical research. Chambers (1997:30-32) isolated four contributing factors, any combination of which may or may not apply to any given project.

The first is reasons of political economy or vested interests: who stands to gain by the acceptance of myths and the continuation of error? This does not immediately seem to apply to this study. Here intentions were good, even if misdirected.

The second is professionalism. Chambers argues:

"erroneous beliefs were embedded in the concepts, values, methods and behaviour normally dominant in disciplines and professions. Those who were

wrong had had long education and training ... Their learning was, then, more likely to come laterally or from above than from below" (Chambers, 1997:31)

This is highly applicable to the findings of this study and will be discussed further. This thesis argues that the correctness assumed by development practitioners is a function of the development agency subculture and can be traced to the modernisation model of development. Furthermore, the business and detail involved in designing projects and making detailed recommendations within strict terms of reference distracts and hinders practitioners from looking for local activity. Projects, as instruments of control, are in fundamental contradiction with development as a process of creativity.

Third, Chambers identifies physical, organisational, social and cognitive distance from the people and local context for which development practitioners are prescribing. This is again applicable to Samoa and has previously been identified there by Pitt (1976a:4347) and Maiava (1988:3). It may be argued that this distance continues today with the results seen here: that farmers are ignored and then blamed. One of the main consequences of distance is the reliance on secondary data and treating numbers as reality (Chambers, 1997:31). Again this was identified by this study.

Fourth is power. This power, Chambers argued, prevents development practitioners from learning. While not suggesting this was deliberate in Samoa, project consultants do assume a professional authority. They are often referred to as 'experts' and are expected to provide answers (recommendations), not ask questions. The documents and reports studied in this thesis in Chapter 3 were all of this nature.

While Chambers is correct in explaining errors as originating within the development/project blue-print subculture described in Chapter 2, it can be suggested that this does not go far enough. The perpetuation of myths identified by this thesis can, it is argued here, be traced to blind-spots and assumptions in the dominant development paradigm.

8.3 Accounting for These Observations in Theory

This thesis is now able to assess which of the theories of development established in Chapter 2 have informed the practice, and predict the outcomes, of smallholder cattle projects in Samoa. Which theory is being implemented in practice, which theory explains

people's responses and actions, and which theory suggests better practices for the future? This is not necessarily one theory: one might be implemented while another explains the response. Particular emphasis is placed on the role of Samoan culture in this assessment.

Smallholder cattle projects in Samoa were implemented within the modernisation/liberal modernisation model of how development should occur. They had many features of modernisation: an inability to perceive Samoan culture in a favourable light, efforts to maximise control by maximising detail, and a centre-outward orientation in which it was believed centrally-determined packages (four cows and a bull) could be transferred to, and adopted into, local contexts as prescribed and without modification.

In Chapter 2 it was shown how Western perceptions had their origins, even if unconsciously, in modernisation and liberal modernisation theory, especially in the role ascribed to culture in this paradigm. It is argued here that cultural misinterpretations in projects are a function of the "paradigmatic blind-spot" (Stavenhagen, 1986:77) in which cultures other than Western culture are not recognised as having any value or role in the development process but rather are to be replaced by 'modern' cultural values. That is, modernisation was a complete package of technology, behaviours and values, a concept originating in Parsons' concept of society as a complete functioning whole within which all parts are inter-connected and necessary.

This concept of blind-spots is taken up by Norgaard: "[Modernisation] creates an overdependence on particular ways of understanding and blindspots through the exclusion of other ways of knowing" (Norgaard, 1994:10). Western ways were assumed to be superior and based on cultural homogenisation. Modernisation required the down-playing, assimilation and sometimes even the repression of cultural diversity (ibid:5). These blind-spots prevented not just the moral value but also the utility of other cultures from being recognised. If other cultures were assumed to be passive, static and restrictive, they could not be recognised as active, innovative and motivating.

As a result the West has been taken by surprise (Norgaard, 1994:174) by cultural resurgences, resistance to development or, as found in this case study, the manipulation and selective adoption of development interventions, having no framework within which to recognise or explain these behaviours except as failure:

"We did not perceive these problems (sic) sooner because we still expected history to unfold progressively. For decades we have been blind to what was really happening, merely being able to see that material progress ... was taking much longer than expected" (Norgaard, 1994:174)

Modernisation theory required social changes to occur as a precondition for and consequence of modernisation. These included changes in size of the productive unit (from extended to nuclear families), changes to land tenure, increasing individualism, entrepreneurial behaviour, economic roles and status determined by achievement rather than ascription, increasing involvement in the monetary economy and increasing material consumption.

Many of these have occurred in Samoa and cattle have been involved with these processes. Farmers have found cattle of considerable utility in making these changes. Cattle are individually owned, they do not require extended family labour to care for them, they are useful in maintaining 'ownership' of individually cleared land, and they are profitable enough to allow an increased level of material consumption. They allow the market to be entered at will and they provide status as a result of economic behaviour. Cattle cannot be said to have caused any of these changes but rather they have facilitated them, together with other influences such as remittances and the continual exposure to Western influence. Cattle have allowed desired changes to be put into practice.

But the list of changes required by modernisation is not complete. Families are now immediate in size and orientation rather than nuclear. Some land is still controlled by *matai* titles or is communal. Rather than becoming completely immersed in the monetary economy Samoan farmers straddle the monetary and subsistence economies. They have no intention of giving up social status by ascription in the form of the *matai* system even though this has been highly modified. In essence then, they have changed what they wanted to change and retained what they wanted to retain. Modernisation theory is unable to account for this behaviour.

Yet, Samoans do want to modernise and do show modern behaviour. Any theory of development must acknowledge and be able to incorporate these desires rather than ignore them as more romantic approaches may do. However, the definition of modernisation offered by modernisation theory is too rigid. Modernisation theory is helpful, however, in identifying some of the changes that occur as a result of development, such as increasing

individualism and material consumption, and in this way may still have something to offer any new model of development.

The practice of modernisation theory also led to emphasis on 'more efficient', large-scale commercial agriculture rather than smallholders and funds were directed towards the WESTEC plantations in Samoa. This thesis suggested this drew potential funds and attention away from the smallholder sector.

However, it was the liberal modernisation model of development which was practised in the distribution of cattle to the smallholder cattle sector. That is, liberal modernisation, rather than aiming to convert agriculture to the large 'efficient' plantation mode, as modernisation would recommend, favoured the incremental improvement of agriculture within existing smallholder systems through such things as appropriate technology. These two models, as we saw in Samoa, were often in conflict, especially in competing for funds, expertise and technology.

Liberal modernisation, with its emphasis on smallholders, identified the characteristics which enhanced adoption of a new technology. This is useful in helping identify some of the reasons cattle are popular: they reduce workload, fit into the farming and livelihood systems, enlarge the range of choice and diversify both risk and sources of income and security.

Even so, farmers were virtually neglected in project documents (apart from criticism of *fa'alavelave*), and after cattle were distributed to farmers funds were not available to ensure regular extension support. The evidence presented here, however, shows that smallholder cattle farmers have been at least as efficient, if not more efficient than WESTEC, with less funding. Once again modernisation theory is found to be inadequate.

It may seem to the sociologist that modernisation as a theory is outdated and has been surpassed. As such, intense criticism may seem unnecessary. However, there are two reasons why a critical approach is taken here. First, is that modernisation is still the model of development implemented by most development practitioners in Samoa, as this thesis has shown, and throughout the Third World (Chambers, 1997). Second, it is still the model of development for development economists as seen in the resurgence of neo-liberalism. Sociologists cannot afford to ignore its continuing influence on development practice.

8.4 From Theory to Experience: What Really Happened

What was really happening in this case study was people interpreting opportunity and responding to it in an active process of negotiation. This concept can be interpreted as both continuing interaction and response between two groups with different ideas or as surmounting obstacles, as a path is negotiated. In both senses the environment is interacted with in order to achieve an objective. The interaction that occurs is a function of the perception of that environment as opportunity and of the perception of possible benefits and therefore possible outcomes.

What also happened was that two cultural imperatives met and clashed. So far the response has been mainly in one direction. Samoans perceived an opportunity and responded to reach a new equilibrium. Planners were hampered in responding back in return however, because they were unable to recognise the Samoan response with which they could negotiate.

The response to cattle was spontaneous and endogenous in origin. Some modernisation has occurred but not necessarily in the way predicted. To account for the difference requires that indigenous negotiation with modern interventions and influences be taken into consideration.

Farmers were also going through a learning process. They learnt for example, the importance of water and how to tame wild animals. The former they learnt from extension officers and the latter on their own initiative. They had not yet learnt the nutritional needs of cattle. In other words the farmers' perspective and the technologists' perspective are both necessary: the learning process is two-way. It is also a long-term process. While cattle projects have been operating in Samoa for more than twenty-five years the learning is not yet complete.

Although, as we have seen, a liberal modernisation model was practiced in smallholder cattle projects in Samoa the responses were only partially as predicted. The incorporation of cattle into *fa'alavelave* was not part of the plan and was an entirely endogenous response. Likewise the use of cattle as walking banks, which lowers productivity, is officially disapproved of. While Samoan cattle farmers were expected to be passive recipients of cattle and farm them according to conventional Western farming practices, they were instead actively adapting and manipulating them according to their own cultural precedents, to their own requirements, both traditional and modern, and showing considerable initiative in doing this.

Negotiation was occurring not only between people and projects but also within Samoan culture between its traditional and modern components. In land tenure, for example, tradition was used to justify modern changes. Cattle, a new technology, were incorporated into traditional *fa'alavelave*. But these apparently traditional occasions had taken on an (unspoken) modern objective of selling subsistence goods (when fine mats are exchanged for money with urban and overseas origins). On the other hand modern commercial activities could be used to fulfil traditional objectives of family livelihood, security and status. Likewise, individuals were constantly negotiating with their culture as individual decisions, such as how many cattle to contribute to *fa'alavelave*, were negotiated within a communal framework.

But as well as cultures, two paradigms of development met and clashed here. While one was implemented another occurred. While modernisation was practiced, an endogenous development occurred that was an active, negotiated response to a development intervention and the opportunities it was perceived to offer, despite that response being misinterpreted and misunderstood by planners.

8.5 A New Theory?

Which theory can account for this behaviour satisfactorily? Such a theory must account for the diversity of culturally-based endogenous responses to development interventions. How can the findings of this research inform development theory? This is one case study which in a post-modern research context has celebrated uniqueness and diversity (Booth, 1994) and has focused on the 'marginalised' as more important than the 'centre'. This focus allows the invalid protestations by development practitioners found in this case study to be recognised as a non-issue. This case study also provides an illustration of how people respond to and negotiate with development interventions. This thesis suggests that aspects of the third paradigm and, in particular, ideas borrowed from peasant studies,¹ populism, and post-modernism can provide a model, and begin to generate a new theory.

But first, however, we must consider whether it is appropriate to be searching for a better theory of development? Post-modern thinking suggests that the whole concept of searching for one unifying theory is in error. It could be argued that the third paradigm is not a theory because it is not a macro-theory like modernisation or Marxism which provides one model to explain all macro-social phenomena. Some might be very uncomfortable with a 'theory'

which allows multiple possibilities in multiple contexts (pluralism). Is it possible to have a theory which can allow for and even predict variable outcomes and diversity?

This thesis takes the position, as argued in Chapter 2, that theory generation is necessary. Theory provides a framework for structuring thinking and for analysing and interpreting observations and empirical evidence in order to gain understanding. It is to this use that theory is put in this thesis. Each theory of development has a set of explanations for observed phenomena and processes of change in the Third World and rationales for intervention. Each makes predictions about the path development will take and this provides a way to test the validity of each.

Modernisation as a macrotheory has a prior commitment to demonstrating the superiority and necessity of capitalist development and how it is to be achieved. Modernisation sees development as a process leading to one ideal end product (free market capitalism) by processes of complete diffusion of changes in values, behaviour and technology. But what of that left behind? Modernisation assumes that the changes made are complete, that nothing of the old remains. Modernisation theory makes a sharp dichotomy between the characteristics of the old and new, and labels the old as obstacles or constraints to development and therefore to be done away with. Likewise Marxist theory states that as each revolution occurs each new mode of production completely subsumes the previous one, leaving nothing of the old mode of production.

But what of Articulation of Modes of Production theory? Marxist writers have recognized that in developing countries traditional or subsistence modes of production continue to exist and interact with the capitalist mode (Althusser, 1970; Worsley, 1984). They explain it as a mechanism of exploitation: that it is advantageous to capitalists to at the same time both undermine and perpetuate the pre-capitalist mode because by doing so they do not have to pay the full costs of the maintenance and reproduction of labour. Certainly articulation of modes of production theory can inform a new paradigm of development as cultural interaction, although it is insufficient in itself. It cannot, for example, explain the incorporation of cattle into cultural rituals.

Neither modernisation nor underdevelopment theory has any explanation for the persistence of village life, of subsistence living which is growing in absolute terms if not relatively, for

cultural resurgences, for fundamentalism, or any form of 'smallholder action', all of which they predicted would disappear.

But they are theories and there are as yet no other theories of development, although there are other perspectives, all seemingly in a great whirlpool of commonsense. But commonsense is not sufficient, it is not tested. There is much grassroots activity and many writers urging the moral superiority of bottom-up development. But the third paradigm is not yet a third theory of development and as such escapes scrutiny. Only by articulating it as a theory will it be able to be scrutinised and tested.

A new theory of development has to explain social change in the Third World, provide a framework for the analysis of change that is observed, and have the ability to predict and explain the diversity of responses to development interventions and the origins and motivations for those responses. This provides a way for it to be tested. It should also be inductive, based not on observations of European history but on researched observations in the Third World. It should be a theory that sees development primarily as a process of cultural interaction in the widest sense. Such a theory can profitably be informed by populism.

8.6 Populism

While populism is generally considered "any creed or movement based on the following major premise: virtue resides in the simple people ... and in their collective traditions" (Wiles, 1969:166) this is an insufficient basis as an explanation for human behaviour. As outlined in Chapter 2, two concepts from populism could, however, prove useful. First, is the concept of the moral economy, originating in the work of Chayanov (1925), in which family welfare rather than profit provides the motivation for subsistence and economic activity. That is, the rural economy is neither capitalist nor socialist but moral. The farming of cattle in Samoa is a caring practice and cattle are used to support and provide security, in both traditional and modern forms, for the immediate family and household. Certainly Samoan farmers aim to make a profit but the motivation for that is found in family welfare.

Second, an essential prerequisite of populism is cultural interaction between two cultures or societies or subcultures in a society, one more economically advanced and powerful than the other. I suggest this is a widespread situation in the Third World where Western influence is

pervasive and forms the basis of understanding development as a process of cultural interaction.

Populism arises as the result of collective awareness or consciousness of a group of relative technological, economic or political disadvantage. It is a locally specific indigenous response to the conflict which arises from the meeting of two distinctly different societies. When two cultures meet they assess, interpret and judge each other. There is the recognition of a material gap between two groups, an indigenous explanation for the gap and indigenous attempts to close the gap. Values, behaviours and technologies will be adopted, manipulated or rejected. Each response will be different because it will be set in different cultural, environmental and historical contexts and be interaction between two different groups of people and ideas. This explains the diversity of responses recognised by post-modernism and encountered by inductive research.

The response is entirely indigenous, 'bottom-up'. It is one of restoration, of regaining control, of 'doing it ourselves in our own way'. This may be by combining the traditional and the modern, a synthesis of the two. Populism is not anti-development. Rather it is seeking an indigenously defined path of development which aims to achieve development via traditional cultural values, aspirations and institutions, blending them with the selective use of modern opportunities, and at the same time, maintaining cultural identity.

This is occurring widely in the Third World and is envisaged by many observers. The call for theoretical recognition of bottom-up development activities is there but what explains it? An explanation is necessary for it to become a new theory of change and development.

I would like to argue a new theory of development as a theory of social change resulting from cultural interaction. In the face of apparent disadvantage or inferiority that becomes evident when two cultures meet, people, I suggest, respond to basic psychological needs (which may appear as material needs). These would include:

** the need to feel good about oneself*

This is the need for positive cultural identity. Cultural regeneration and idealisation is a response to overcome apparent deficiency when faced with a more 'advanced' society or subculture; to say "Hey I'm O.K. too. You might be more advanced materially and have

more power but I've got better, more moral, more wholesome values, traditions and lifestyle". It provides an avenue to feel confident and self-assured in the face of contradictory evidence.

** the need to belong and feel secure*

This is the need for social inclusion. Belonging, identity and social security is provided by valuing kinship and social relationships. This is the basis of the 'moral economy'. Fraternity, solidarity and participation in society by all its members is valued in the face of external alienation.

** the need to feel in control of one's life*

This is the need for empowerment. Populism is a response to the sense of powerlessness and frustrating lack of control over one's life and life situation. It seeks for people to regain control and to be directly involved in controlling their own lives as of right. This is the need to create certainty (Porter et al., 1991:175).

** the need to be free, active and independent*

This is the need to be creative (Rahman, 1993:223), to move freely and "create space" (Oakley and Marsden, 1984:26) and to remain independent of outside forces (Porter et al., 1991:17). It is the need to make one's own decisions and choices and be able to act on them and put them into practice. This is essentially Long's (1992:22) concept of 'agency', and also coincides with Chambers' call for "sustainable livelihood security" (Chambers, 1988:1).

The adoption and farming of cattle, the continuing ritual of *fa'alavelave* and the incorporation of cattle into *fa'alavelave* fulfil all these needs. For Samoans, the farming of cattle spreads risk, creates greater certainty in their ability to cope with life's events, and allows them to create space.

Samoans do not have any feeling of inferiority that might be suggested here. Rather such feelings have been avoided by the continuing strength of Samoan culture which satisfies these needs. The fact that Samoans do incorporate cattle into *fa'alavelave* when it is officially disapproved of allows them to feel good, reasserts belonging, security and identity,

gives them control of their own activities, and independence. In deciding to use cattle this way they have interacted with official expectations at the interface of rural development, made their own independent decisions and put them into practice.

I suggest these four fundamental human needs that guide behaviour can form the basic tenets of a new theory. They provide the motivations to explain social change, and the tools with which to predict behaviour and the direction of change. By combining them with the populist model of cultural interaction we also have, I suggest, a framework for interpreting, understanding and unifying the multitude and variety of active responses to development stimuli, the social movements and grassroots development initiatives that are observed in the Third World, as well as the more spontaneous straddling of economies and everyday endeavours of Third World citizens that the other theories are unable to explain.

Any theory would emphasise the interactive processes, the "interplay and mutual determination of 'internal' and 'external' factors and relationships" (Long, 1992:20) and would recognize the central role played by human action, consciousness and culture in that process, rather than determining in advance the ultimate goal.

But how does this depart from or develop existing populist theory? Populist responses are often characterised as resistance. Taylor and McKenzie (1992:22) question "the extent to which ... grass-roots initiatives may facilitate development 'from within', ie. may be strategic in intent rather than merely coping with crisis"?

Peasant action is characterised by Scott (1985) and Colburn (1989) as primarily relatively spontaneous 'everyday forms of resistance' in order to protect the *status quo ante*, to protect traditional sources of provision, livelihood and subsistence, or "the struggle to remain the same" (Brass, 1991:191). This suggests coping and retrenchment rather than strategic intent and is a common misconception of smallholder action.

The situation found in this study in Samoa was not like that however. It cannot be said that the Samoan experience with cattle was one of deliberate resistance. There was no hidden political agenda for using cattle in *fa'alavelave*. Farmers were not consciously involved collectively in a struggle for their own empowerment. For a start they do not doubt the power and authority they already have in their own country.

Furthermore, Samoans are not attempting to remain the same. Instead what was observed was attempts to progress and move forward using culturally and contextually determined criteria, both traditional and modern. The action observed was not retrenchment or resistance but adoption. This adoption was, however, made on indigenously defined terms and motivated by Samoan cultural imperatives. The utilisation of cattle was strategic.

There was, however, a clash of cultures, a meeting of worlds, a clash of paradigms. As we saw, modernisation was implemented but the response was populist. Here we see the two aspects of populism: the motivating 'moral economy' (Samoan cultural imperatives, especially family welfare and social standing) and the 'active response' or negotiation with new and changing contexts, and perceived opportunities.

Despite the argument that Samoans want to modernise, the motivation for that is not capitalist profit but as explained in Chapter 4, the family and the position of the family in the community. It was argued there that the family motivates all behaviour, including economic behaviour, even though the family is getting smaller and more independent. Farmers farmed cattle "to support the family", whether via *fa'alavelave* or material goods.

The point of originality here is not that populism should become a theory of development but that selected ideas from populism and post-modernism be borrowed to inform the basis of a new theory of development. The link between them is that ideas from populism can explain the diversity and the importance of activity at the 'margins' recognised by post-modernism, and the observations and conclusions of this thesis.

8.7 Locating This Research in Development Projects

If it is accepted that a theory informed by populism and post-modernism, and which would incorporate many of the ideas already part of the third paradigm or people-centred approach is valid, what are the implications for putting such a theory into practice in the context of development projects? What broad conclusions can be drawn from this study?

This research has found that the 'recipients' of development interventions do not respond as expected. But they do actively respond to the opportunity they perceive. Therefore detailed planning of what is supposed to happen (the blueprint approach) is simply a waste of resources. Instead what does happen must be researched and learned from. Development

Studies should be the study of the diverse experiences of development rather than attempting to determine in advance the path development should take. That requires a reorientation from deductive to inductive approaches to development practice and research.

This also requires much longer time-frames, and evaluation of long-term outcomes instead of short-term outputs as measures of success. We have seen that what may be characterised as failure in the short-term may, in the long-term result in successful outcomes and new equilibria in terms of the recipients' criteria. It is important to study change over time. Furthermore, Chambers argues that only time-series studies and methodological pluralism, such as used by this research, can show misinterpretations and errors, such as those found by this thesis, to be incorrect (Chambers, 1997:29-30).

This study has highlighted the importance of the cultural context of any development intervention. More attention should be paid to farmers in the design of projects. More research into farmers' views, circumstances, cultural context, farming systems and livelihoods is necessary in the early stages of project design. Assumptions of farmer behaviour should not be accepted as fact by project designers without being researched at village level (rather than quoting from previous project documents), and over a longer time period.

Projects must be fitted to people and not vice versa, in order to be successful and sustainable. It must be recognised that farmers have valuable ideas, and tradition is not necessarily a constraint. Farmers want to make progress within their culture. Farmers' objectives should be project objectives and projects should facilitate farmers' initiatives. Farmers are the ultimate decision makers and therefore the ultimate determinants of project success. Success should be measured according to farmers' criteria.

However, farmers should not be viewed uncritically. Local people have essential knowledge and experience and projects must be fitted to people's culture, knowledge, technology, aspirations and circumstances, and planners must recognize and learn about these. However, local people don't know everything (as neither do planners). They may not recognize the true nature of a problem or constraint. They may not know what solutions are possible or available. They may not have the skills or opportunities necessary. Therefore a blending of top-down and bottom-up approaches involving a two-way learning process approach is necessary for successful, popular and sustainable development.

The people-centred bottom-up approach to development projects, including calls for greater participation in the project cycle, has been advocated during the last three decades by observers such as Cohen and Uphoff (1977), Korten (1980, 1990), Chambers (1983, 1997), Rondinelli (1983a, 1992), Korten and Klauss (1984), Oakley and Marsden (1984), Cernea (1985, 1991), Oakley et al. (1991), and Long and Long (1992), as outlined in Chapter 2.

People-centred development has an emphasis on listening to farmers. But people-centred development, in valuing farmers, has a tendency to undervalue and underestimate the contribution of Western technology and the scientific research necessary to adapt new technology to Third World environments and farming systems. Cattle are a new technology for Samoa and their incorporation is a learning process, not just for the farmers but for project planners. Ideally such issues as choice of breed should have involved much more research on farms in Samoa, but breed, in particular, seems to have been a random matter. Modernisation also has a blind-spot to this in assuming that what works in the donor country will work in the recipient country.

The critique of modernisation offered by this thesis is not new to academics who have moved on to post-modernism. But the point made here (and by Chambers, 1997) is that development practitioners are still constrained by deeply ingrained professional beliefs and limitations consistent with the modernisation world-view, whether as a result of socialisation or professional training. They may seek to maximise control or achieve results quickly within budget, blinded by their own realities and false perceptions of other people's realities. Modernisation continues to influence the practice of development through the rise and dominance of neo-liberalism.

Accepting development as cultural interaction requires a balance or a blend between bottom-up and top-down approaches. Meeting in the middle is essential for designing and achieving sustainable development projects. Development is a process of interaction and negotiation between two sets of knowledge, two sets of realities. Eventually a middle ground or equilibrium will be found.

Finally, this thesis concludes that there may be a theoretical basis that can underpin the third paradigm/people-centred collection of ideas that has, until now, floundered, unable to call itself a theory but having a moral force that could not be disputed. Having inductive, grass-

roots origins rather than a unifying, deductive meta-narrative, and heavily informed by both populism and post-modernism, a theory can be identified which explains development as a creative, dynamic process of interaction, negotiation and response between cultures, motivated by four core psychological needs that become apparent when two cultures meet. This results in a diversity of manifestations of the development process in variable cultural and historical contexts.

It is a theory that recognises that the principles that guide people's behaviour are more complex than capitalism, individualism or profit, or indeed class. Development is a complex and diverse process. The flexibility of cattle facilitates the negotiation of that process by rural smallholders in Samoa.

¹ See Chapter 2, footnote 7. Samoans cannot be considered peasants. This thesis is only interested in borrowing ideas from peasant studies that might be applicable to the issues raised by this thesis.

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SURVEY OF CATTLE FARMERS

Respondent Number

Initial Data Collection

Name/IGOA _____

Village/NU'U _____

Location/NOFOAGA/ITUMALO _____

Number of Project Cattle Received Heifers/POVI TAANOA _____

NUMERA O POVI NA MANA MAI

I LE ATINAE POVI

Bulls/PULU _____

Steers/SITIA _____

Date Cattle Received

ASO NA MAUA MAI IA POVI

Total/AOFAI _____

_____ Total Herd Size/ NUMERA AOFAI
 (Incl from other sources/locally bred)
 (AOFIA AI MA POVI MAI ISI NOFOAGA)

Regarding Project Cattle Only...Number of
 POVI O LE ATINAE...NUMERA O

Births/ TAMAI POVI FANANAU _____

Thefts/ POVI GAOI _____

Sold/Slaughtered for Sale

POVI FAATAU ESE ATU/FASIMATE MO LE FAATAU ESE ATU _____

Slaughtered for Fa'alavelave - Heifers/Cows

FASIMATE MO FAALAVELAVE

POVI TAANOA/POVI AUMATUA _____

Type of Fa'alavelave

ITUAIGA FAALAVELAVE

- Bulls/PULU _____

- Steers/SITIA _____

_____ Other loss (eg. died, escaped)

ISI POVI MAUMAU (eg. MATE, SOSOLA) _____

Initial Notes/Observations

Improvement Work/GALUEGA FAALELEIA -

Fencing/PA -

Pasture/VAO -

Problems (eg. water/weeds) -

FAAFITAULI (eg. VAI/VAO LEAGA)

Response/Arrangement made for Interview

TALI/FUAFUAGA MO LE FAATALANOAGA

Comment/MANATU

7. (If live off farm) How far is your farm from where you live?
 O LE A LE MAMA O LE NOFOAGA O LOO E ALALA AI MAI LAU FAATOAGA

_____ MAILA/miles

B. Your Farm/ LAU FAATOAGA

8. How large is your land
 OLE A LE TELE O LOU FANUA? _____ EKA/acres

9. Who owns the land?
 O AI E ONA LE FANUA?

- a. Yourself (incl. wife)
 O OE LAVA
- b. Your immediate family (incl. brothers,
 LOU AUAIGA sisters, parents)
- c. Your extended family
 AIGA POTOPTO
- d. The village
 O LE ALALAFAGA
- e. You lease it
 LISI-INA
- f. Other/SE ISI MEA _____

10. Who controls the use of the land?
 O AI E PULEA LE FAAAOGAINA O LE FANUA?

- a. Yourself
 O OE LAVA
- b. A matai of your family
 LE MATAI O LOU AIGA
- c. Other/SE ISI MEA _____

11. Have you ever had any difficulty keeping the land for your
 cattle farm? PE UA IAI EA SE FAAFITAU LI I LOU FAAAOGAINA PEA O
 LE FANUA MO LAU FAATOAGA LAFUMANU PAPALAGI?

Yes/IOE

No/LEAI

If Yes, Please explain
 AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI _____
 (eg. family rivalry etc.)

12. Are your cattle/ O LAU LAFUMANU

- a. Under coconuts?
 O I LALO O SE TOGANIU?
- b. On pasture you cleared from bush? over
 O I SE FANUA FAATO MAI LE VAO TA?

c. On long established pasture?
 O I SE FAANUA UA LEVA ONA FAAAOGAINA?

13. What else do you farm for sale?
 O A NISI MEA FAATAU O I LAU FAATOAGA? _____

(eg.coconuts,taro,cocoa etc.)

C. Your Cattle/ LAU LAFUMANU PAPALAGI

14. Who owns these cattle?
 O AI E ONA MANU?

- a. Yourself (incl. wife)
 O OE LAVA
- b. Your immediate family (incl.brothers,
 LOU AUAIGA sisters,parents)
- c. Your extended family
 LOU AIGA POTOPOTO
- d. Village Women's Committee
 NUU KOMITI A TINA
- Matai or Village Association
 MATAI POO LE FAALAPOTOPOTOGA
 A LE ALALAFAGA

15. When did you first start cattle farming?
 O ANA FEA NA AMATA AI LAU FAATOAGA LAFUMANU PAPALAGI?
 _____ TAUSAGA/Year OR _____ /Years Ago
 I TAUSAGA UA MAVAE

16. Why did you begin?
 O LE A LE FAAMOEMOE NA AMATAINA AI?

- a. To increase income
 MO SE TUPE MAUA
- b. For fa'alavelave
 MO FAALAVELAVE
- c. Cheap cattle were available
 SA TAUGOFIE LE TAU O MANU
- d. To make use of idle land
 IA FAAAOGAINA AI LE FANUA
- e. To clear weeds under coconuts
 IA FAAMAMA LE VAO I LALO O TOGANIU
- f. Hobby/ as an interest
 O SE MEA E FIAFIA IAI

g. Other/NISI MEA _____
 (eg.neighbour/relative was doing it)

24. What are the most significant reasons for the dips?
O A MAFUAAGA O LE FAAITIITA O MANU?

- | | | RANK/TULAGA |
|--|--------------------------|-------------|
| a. Slaughter for income
FASIMATE MO SE TUPE MAUA | <input type="checkbox"/> | _____ |
| b. Stealing
GAOIA | <input type="checkbox"/> | _____ |
| c. Slaughter for fa'alavelave
FASIMATE MO FAALAVELAVE | <input type="checkbox"/> | _____ |
| d. Deaths
MATE
(eg. due to calving etc.) | <input type="checkbox"/> | _____ |
| e. Cattle escaping
LEILOLOA MANU | <input type="checkbox"/> | _____ |
| f. You leaving the farm
O LOU TUUA O LE FAATOAGA | <input type="checkbox"/> | _____ |
| g. Other/NISI MEA _____ | <input type="checkbox"/> | _____ |

25. Have your plans/attitudes changes since you began?
PE UA SUIA AU FUAFUAGA/LAGONA UA IAI TALU MAI LE AMATAGA O
LAU FAATOAGA?

Yes/IOE

No/LEAI
(Go to Q.28)

26. If Yes, In what way?
AFAI O LEA, I LE A LE ITU?

- | | |
|---|--------------------------|
| a. You realize your cattle are more valuable
UA E SILAFIA LE TAUA / AOGA O LAU LAFUMANU | <input type="checkbox"/> |
| b. You think of cattle farming more as a business/
as a source of income / UA E MANATU O LAU LAFUMANU
O SE PISINISI/ O SE ALA TUPE MAUA | <input type="checkbox"/> |
| c. You are less willing to kill cattle for fa'alavelave
UA FAAITIITIA LOU FIA FASIMATE INA O MANU MO FAALAVELAVE | <input type="checkbox"/> |
| d. You are more willing to kill cattle for fa'alavelave
UA E NAUNAU E FASIMATE MANU MO FAALAVELAVE | <input type="checkbox"/> |
| e. You have a greater desire to breed & build up your herd
FAATELEINA LOU FIA FAALELEIA MA FAATELEINA O LAU LAFUMANU | <input type="checkbox"/> |
| f. You don't care as much/ have lost your motivation
FAAITIITIA LE TAUA O LAU LAFUMANU IA LAU SUSUGA | <input type="checkbox"/> |
| g. Other/ SE ISI MEA _____ | |

27. What do you think has caused this/these change/s in your attitude?

PO O LE A LE MAFUAAGA/PO O MAFUAAGA UA OO IAI IA SUIGA I AU FUAFUAGA?

- a. The decreased subsidy/cattle are more expensive now
FAAITIITIA O LE FESOASOANI TAU TUPE MAI LE MALO MO
LE FAATAUINA O MANU
- b. Increased income from cattle
FAATELEINA TUPE MAUA MAI LAFUMANU
- c. The contract with the Government
FEAGAIGA MA LE MALO
- d. Difficulties farming cattle (incl. stealing etc.)
FAAFITAU LI O LE FAIFAATOAGA
Especially/AEMAISE _____
- e. Family pressures (incl. killing for fa'alavelave)
MANAOGA O LE AIGA
- f. Other/ NISI MEA _____

28. Have you ever slaughtered heifer/s?

PE NA E FASIMATEINA EA NI MANU PALAGI TAANOAA?

Yes/IOE
(Go to Q.29)

No/LEAI

If No, Would you (in the future)?
AFAI E LEAI, PE UA E FUAFUUA E
FAIA LEA (I SE TAIMI O MUAMUA)

Yes/IOE

No/LEAI
(Go to Q.30)

29. If Yes, Has your attitude to that changed?

AFAI O LEA, PE UA SUIA LEA LAGONA SA IA TE OE?

Yes/IOE

No/LEAI

Reason/ MAFUAGA _____

30. When you received cattle from the Government in 1985-1986, you signed a contract.

SA E SAINI INA SE FEAGAIGA MA LE MALO INA UA E MAUAINA NI MAU.

Can you recall the age you have to keep the animals before slaughtering?

E TE MANATUAINA OA TAUSAGA FATOA FASIINA IA MANU?

- Yes/IOE..a. Heifers/ MANU PALAGI TAANOAA _____ TAUSAGA (years)
- b. Bulls/ PULU _____ TAUSAGA (years)
- c. Steers/ SITIA (if apl) _____ MASINA (months)

No/LEAI

(Correct?)

31. Can you recall the penalty for slaughtering them too young?
PE E TE MAITAUINA O LE A LE FAASALAGA MO LE FASIMATE INA O
MANU AO LAITI?

Yes/IOE: \$ _____ No/LEAI
(Correct?)

32. How do you feel about the contract?
OLE A SOU LAGONA I LEA FEAGAIGA?

a. A good idea
O SE FUAFUAGA LELEI

b. Neutral
LEAI SE AFAINA

c. A bad idea/ don't like it
O SE FUAFUAAGA LE MANUIA/ LE FIAFIA IAI

d. Other/ NISI MEA _____

33. Has it stopped you slaughtering when perhaps you would have
previously?

PE NA TAOFIA AI LOU FASIMATE INA LAITI O MANU O LAU FAATOAGA?

Yes /IOE No /LEAI

34. How did you pay for these cattle (ie.cattle from Govt.1985-86)?
NA FAAPEFEA ONA TOTOGIINA NEI MANU?

a. A loan/ SE NOGA TUPE

b. Sale of previous cattle
TUPE MAI LE FAATAUINA O NI POVI MUAMUA

c. Income from crops
TUPE MAUA MAI LE FAATOAGA LAU AINA

d. Off-farm income
MAI SE ISI ALAGATUPE E ESE MAI LE FAATOAGA

e. Remittances (Money sent by relatives overseas)
TUPE MAI I AIGA I ATUNUU I FAFO

f. Other/ NISI MEA _____

35. Do you receive remittances?

PO O E MAUAINA NI TUPE MAI ATUNUU I FAFO?

Yes/IOE No/LEAI

36. How much do you think a
O LE A LOU ILOA I LE TAU O SE

a. Heifer/breeding cow is worth?
MANU PALAGI TAANO/AUMATUA MANU PALAGI FANAFANAU \$ _____

b. 3 year old bull/steer is worth?
PULU/SITIA UA 3 TAUSAGA \$ _____

37. Have you sold cattle
PE UA FAATAU ATU NI AU MANU

- a. to a butcher? Yes/IOE No/LEAI
I SE FALE FASI POVI?
- b. to another farmer? Yes/IOE No/LEAI
I SE ISI FAIFAATOAGA?

38. What have you done with that income? OR
What would you do with that income?
PO O LE A SE MEA NA FAI I LE TUPE NA MAUA MAI?

- a. Put it back into your cattle farm
FAAAOGA MO LE FAALELEIA ATILI O LE FAATOAGA
- b. Given it for fa'alavelave
FAAAOGA MO FAALAVELAVE
- c. Capital investment (other than cattle)
FAAAOGA MO NI MEA TOTINO
(E ESE MAI MANU PAPALAGI)
- d. Daily living costs
FAAAOGA MO MEA E MANAOMIA
- e. Put it in the bank
TEU I LE FALE TUPE
- f. Other/ NISI MEA _____
(eg. airfares, school fees etc.)

38a Do you think that you get more return for your effort from
cattle compared to your crops?
PE E TE MANATU E TELE TUPE E MAUA MAI MO AU GALUEGA I LAU
LAFUMANU PAPALAGI PE A FAATUSA I FUA MAI LAU FAATOAGA LAU?

Yes/IOE No/LEAI

39. Do you think it is possible to earn a living out of farming
cattle full-time?
PE E TE MANATU E MAFAI ONA E OLA MANUIA I LE NA O LE GALUE
ATOATO A I LE ATINAE MANU PAPALAGI?

Yes/IOE No/LEAI

If Yes, Are you planning to do this?
AFAI O LEA, O E FUAFUA E FAIA LEA ITU?

40. If No, Why not?
AFAI E LEAI, AISEA LEA?

Yes/IOE No/LEAI

41. If Yes, What will be
your major problems?
AFAI O LEA, O A FAAFITAULI?

42. If No, Why not?
AFAI E LEAI, AISEA LEA?

Answers for Q. 40 or 41 or 42: pto

Q40-42

- a. Not enough land available
LE LAVA LE FANUA
- b. You regard cattle as an "extra" source of income/a hobby
UA MANATU O MANU PAPALAGI E MAUA MAI AI SE ISI ALA
TUPE FAASILILI/ O SE MEA E FIAFIA IAI
- c. It wouldn't earn enough money
E LE LAVA SE TUPE E MAUA MAI AI
- d. You are satisfied with things as they are
FAAMALIEINA I LE TULAGA O LOO I AI MEA I LE TAIMI NEI
- e. You have to wait too long to get any return
UMI LE TAIMI O FAATALI FAATO A MAUA SE TUPE MAUA
- f. Your earnings go to your family (ie. not enough
personal reward)
O TUPE MAUA E ALU LEA I LOU AIGA
- g. Too many fa'alavelave reduce return
TELE FAALAVELAVE E FAAITIITIA AI TUPE MAUA
- h. You have to work for your family
E AO ONA E GALUE MO LOU AIGA
- i. Family control of the land
PULEAINA E LOU AIGA O LE FANUA
- j. Farming is boring / low status
FAILAFUMANU O SE GALUEGA LE FAATOSINA /
MAUALALO LE TULAGA O LE FAILAFUMANU
- l. Too much hard work
TELE GALUEGA
- m. You make more money from your job
TELE TUPE MAUA MAI LAU GALUEGA
- n. You get enough from remittances
LAVA TUPE E MAUA MAI I AIGA I ATUNUU MAMA O
- o. You prefer to live/work in Apia
SILI ATU LE NOFO/FAIGALUEGA I APIA
- p. Shortage of water
LE LAVA LE SUAVAI
- q. Stealing
GAOI
- r. Not enough labour available in your village
LE LAVA TAGATA FAIGALUEGA I LE NUU
- s. Facilities/NOFOAGA _____
- t. Other/ NISI MEA _____

D. Cattle and Fa'alavelave
LAFUMANU PAPALAGI MA FAALAVELAVE

43a. How important are fa'alavelave to you?
O LE A LE TAUA O FAALAVELAVE I LAU SUSUCA?

- | | |
|--|--------------------------|
| a. Very important/ TAUA TELE | <input type="checkbox"/> |
| b. Important/ TAUA | <input type="checkbox"/> |
| c. Some are important (Specify)
O NISI E TAUA (TAU MAI) | <input type="checkbox"/> |
| d. Neutral/ E LE AFAINA | <input type="checkbox"/> |
| e. Not important/ E LE TAUA | <input type="checkbox"/> |

43b. Do you think they are a burden?
O LOU MANATU O AVEGA?

Yes/IOE

No/LEAI

Comment/ MANATU _____

43c. Do you think people give too much?
O LOU MANATU UA SOONA AVE E TAGATA MEA I FAALAVELAVE?

Yes/IOE

No/LEAI

Comment/ MANATU _____

43d. If you have both money and cattle available, which would you prefer give to a fa'alavelave?

AFAI O LOO E MAUA TUPE MA MANU PAPALAGI, OLE FEA O MEA IA
E TE AVEA I SE FAALAVELAVE?

- | | |
|--|--------------------------|
| a. Cattle/ MANU PAPALAGI | <input type="checkbox"/> |
| b. Money/ TUPE | <input type="checkbox"/> |
| c. Buy something else
FAATAU MAI SE ISI MEA | <input type="checkbox"/> |

43e. How does this depend on the type of fa'alavelave it is?
E FAAFEEA ONA E FUAFUA I LE ITUAIGA FAALAVELAVE UA IAI?

44. Why do you give to fa'alavelave?
AISEA E TE AVEA AI MEA I FAALAVELAVE?

- | | |
|---|--------------------------|
| a. Helping the person/family with the fa'alavelave
FESOASOAAINI I LE TAGATA/AIGA I FAALAVELAVE | <input type="checkbox"/> |
| b. Upholding the family name
TAUAVE AI LE IGOA O LE AIGA | <input type="checkbox"/> |

pto

c. Its the Samoan way, the culture
 AGANUU FAASAMOA

d. To avoid criticism
 AUA NEI I AI SE FAASEA

e. Other/ NISI MEA _____

45. Do you have any of your herd "ready" for faalavelave in your mind
 PO UA I LE MAFAUFAU O LAU SUSUGA SE MANU POO MANU PAPALAGI FOI
 UA FUAFUA MO FAALAVELAVE MAI LAU ATINAE MANU PAPALAGI?

Yes/IOE

No/LEAI

46. When was the most recent
 time you slaughtered
 cattle for faalavelave?
 O ANAFEA LE TAIMI LATA MAI
 NA FASIMATE AI SE MANU PALAGI
 MO SE FAALAVELAVE?

50. When was the time before that,
 that you slaughtered cattle
 for faalavelave?
 O LEA LE ISI TAIMI MUAMUA
 ATU NA FASIMATE AI SE MANU
 PALAGI MO SE FAALAVELAVE?

Month _____ Year _____
 (MASINA) (TAUSAGA)

Month _____ Year _____
 (MASINA) (TAUSAGA)

(Never/LEAI : Go to Q 52.)

(Repeat Q's 47-49)

47. What was the occasion?:
 O LE A LE ITUAIGA FAALAVELAVE?:

	Family relationship FAIA FAALEAIGA	Family relationship FAIA FAALEAIGA
a. Funeral MALIU	<input type="checkbox"/> _____	<input type="checkbox"/> _____
b. Wedding FAAIPOIPOGA	<input type="checkbox"/> _____	<input type="checkbox"/> _____
c. Fine FAASALAGA	<input type="checkbox"/> _____	<input type="checkbox"/> _____
(Reason/MAFUAGA _____)		

d. Overseas visitor
 MALO MAI FAFO _____ _____

e. Sua
 SUA _____ _____

f. Conferment of Title
 SAOFAI _____ _____

g. Other
 NISI MEA _____ _____

48. How many cattle did
 you slaughter (total)?

E FIA MANU PAPALAGI _____
 NA E FASIMATEINA? (AOFAI) _____

How many of those were Heifers/
Breeding Cows?

E FIA LE NUMERA O MANU PAPALAGI TAANO/
AUMATUA MANU PAPALAGI FANAFANAU/ _____

49. How did you feel about killing cattle for this?
O LE A SOU LAGONA I LE FASIMATEA O MANU PAPALAGI MO IA
FAALAVELAVE?

- a. Pleased you could contribute/satisfied
FIAFIA UA MAFAI ONA FESOASOANI/FAAMALIEINA
- b. Neutral (eg. duty/to be expected)
LE AFAINA (eg. TIUTE/PEI ONA FUAFUAINA)
- c. Disappointed/felt 'obliged'
FAALEFIAFIA ONA PEI O SE MEA E TATAU ONA FAI
- d. Angry that you were forced to
TOATAMAI ONA UA FAAMALOSIA LAU SUSUGA
- e. Other/ NISI MEA _____
(go back to Q.50)

51. If answered c. or d. (obliged or forced against true will)

- a. Who pressured you? _____ (Family
O AI NA FAATAUANAUINA OE? _____ relationship)
- b. How? I LE A LE AUALA? _____
- c. Why did you give when you really didn't want to?
AISEA NA AVE AI AU MANU PE AFAI SA E LE MALIE IAI?

d. Did this affect your breeding plans for your herd?
PE NA AAFIA AU FUAFUAGA MO LAU LAFU MANU ONA O LEA TULAGA?

Yes/IOE

No/LEAI

e. What is your relatives' attitude towards your cattle?
O A LAGONA O LOU AIGA I LAU LAFU MANU PAPALAGI?

f. Do they realise the value of your cattle?
PE NA LATOU SILAFIA LE TAUA O LAU LAFU MANU PAPALAGI?

Yes/IOE

No/LEAI

Go to Q.53

52. If you have never slaughtered cattle for fa'alavelave, Why
is this? AFAI E LEI FASIMATEA LAVA NI AU MANU PAPALAGI MO
FAALAVELAVE, AISEA LEA?

- a. Only a new cattle farmer, no fa'alavelave yet pto
ONA O LE FAILAFUMANU PAPALAGI FOU, LEAI NI FAALAVELAVE

- b. Your cattle are not for fa'alavelave
O AU MANU PAPALAGI LE FAAAOGAINA MO FAALAVELAVE
- c. Other/ NISI MAFUAAGA

53. How do you think you will probably react the next time a fa'alavelave occurs?

O LE A SOU LAGONA PE AFAI O LE A TOE TUPU SE ISI FAALAVELAVE?

- a. Pleased you can contribute, satisfied
FIAFIA UA MAFAI ONA FESOASOANI
- b. Neutral, accept it
LE AFAINA, MALIE IAI
- c. Disappointed but still give
FAANOANOAE TALIA LAVA
- d. Angry but still give
ITA AE TALIA LAVA
- e. You will refuse to give cattle
O LE A E TETEEINA

(Answer same as before (Q.49)? Yes No)

54. Have you ever said "No" to requests for cattle for fa'alavelave?
PE UA E TETEEINA EA LE FASIMATEA O SAU MANU PALAGI MO SE FAALAVELAVE

Yes/IOE

No/LEAI
(Go to Q.56)

55. If Yes, Were there any social consequences? (Describe)
AFAI O LEA, PE NA IAI NI FAASEA MAI MULIMULIANE?

56. Do you think you are more likely to say "No" in the future?
E TE MANATU E FOLIGA MAI O LE A E TETEEINA I SE TAIMI O I LUMA?

Yes/IOE

No/LEAI

57. Do you think that slaughtering cattle for fa'alavelave is really a problem for Samoa?

E TE MANATU O LE FASIMATEINA O MANU PAPALAGI MO FAALAVELAVE
O SE FAAFITAULI TELE LEA I SAMOA?

Yes/IOE

No/LEAI
(If No, End of Survey)

58. If Yes/ AFAI O LEA

a. Why do you think people give when it is really a problem?
O LE A SOU MANATU AISEA E FASIMATE AI MANU PAPALAGI MO
FAALAVELAVE PE AFAI O SE FAAFITAULI?

b. Can you suggest any alternatives or solutions to this problem?
E MAFAI ONA E TAU MAI NI AUALA E FOIA AI LEA FAAFITAULI?

Respondent Number

QUESTIONNAIRE 1 : To 1987 farmers with cattle

1. Name/SUAFA _____
(original interviewee)

4. Village (where cattle are)
ALAALAFAGA (FAATOAGA) _____

Location of interview
NOFOAGA O LE FAATALAN _____

Date of 1st interview _____ Telephone No.
TELEFONI _____

Agreed time for second interview _____
TAIMI AUAI MO LE FAATALANOAGA LONA LUA

Date 2nd interview completed _____

INTRODUCTION / UPU TOMUA

Talofa lava. In 1987 I visited you and asked you some questions about your cattle and your experiences as a cattle farmer.
TALOFA LAVA. I LE TA FEILOAIGA I LE 1987 SA FESILIGIA AI LAU SUSUGA E UIGA I AU MANU PAPALAGI ATOA AI MA LOU TOMAI I LENEI FOI ATINAE.

I am now doing research for my PhD degree at Massey University in New Zealand and would very much appreciate it if I could ask you some more questions about your experience with cattle.
O LOO FAI NEI LA AU SUESUEGA MO LOU FAALOGA O LE FAAFOMAI FILOSOFIA I LE IUNIVESITE O MASSEY I NIU SILA MA E I AI LAVA LE AGAGA FAAFETAI ONA E I AI NAI ISI FESILI E FIA TALANOA ATU AI I LAU SUSUGA E TUSA AI MA LAU FAATOAGA LAFU MANU PAPALAGI.

Do you still have cattle?
PO O I AI PEA AU MANU PAPALAGI I LE TAIMI NEI?

Yes/IOE

No/LEAI

If YES, continue. If NO, administer Questionnaire 2

I will only take about two hours of your time so I would like to spend about an hour with you today and then make a time to come back.

PEA TALAFEAGAI AI ATONU PE LUA NI NAI ITULA O LOU TAIMI E FIA TALATALANOA AI MA LAU SUSUGA. SE ITULA E TASI I LE ASO MA SE TAIMI MULIMULI ANE E TOE FIA FAAFESOOTAI MAI AI LAU SUSUGA.

I hope that my study will contribute to a greater understanding of cattle farming in Samoa in the future and my findings will be made available to everyone who has contributed to them.
E I AI LAVA LE FAAMOEMOE O LENEI SUESUEGA O LEA I AI SONA SAO I LE MALAMALAMAGA ATILI I FAATOAGA LAFU MANU PAPALAGI I SAMOA I LE LUMANAI MA O IUGA E MAUA MAI I LENEI SUESUEGA E TUUINA ATU I SOO SE TASI E PEI O LAU SUSUGA O E NA FESOASOANI I LENEI TAUMAFAGA.

Be assured that all replies are absolutely confidential and no-one will be individually identified.

O TALII MA FAAMATALAGA UMA E MAUA MAI I LENEI SUESUEGA E PUIPUA
LEA MA E LE FAAILOA ATU FOI I LATOU TAITOATASI O LOO AUAI I LENEI
TAUMAFAGA.

Please do not hesitate to say if the meaning of any of the questions is unclear.

AFAI E I AI SE MEA E LE O MALAMALAMA AI I LE FESILI E MAFAI LAVA
ONA TOE FAFESILI MAI.

Please feel free to add any comments or opinions.

AFAI FOI E I AI NI FAAMATALAGA POO NI MANATU FOI E FIA FAAOPOPO
MAI E LAU SUSUGA O LEA FAAPEA LAVA ONA TALIA MA LE FIAFIA.

Please correct me if any questions show a lack of understanding.

FAAMOLEMOLE IA FAASAO MAI PE AFAI O I AI NI FESILI E LE TALAFEAGAI
AI LONA FAAMALAMALAMAGA.

Some questions only need short answers but for others I would like to invite you to share with us the story of your own experience with cattle and what has been significant or meaningful to you, whether good or bad. Thank you.

E I AI FESILI E MANAOMIA AI NI TALII PUPUU A O ISI FOI E MANAOMIA
AI FAAMATALAGA E UIGA I LOU ILOA I LAU FAATOAGA LAFU MANU PAPALAGI
PE I AI SE MEA POO NI MEA TAUA UA E MAUA MAI AI, PE LELEI PE
FAALELELI FOI. FAAFETAI LAVA.

A. Repeat Questionnaire to 1987 farmers

2. Are we interviewing the same person? Yes
PE O LE TAGATA LAVA E TASI LEA E FAATALATALANOAA? IOE

IF NOT: Details: a. Name

AFAI E LEAI: AUILIILIGA: _____

b. Age/SOIFUAGA _____

c. Relationship to original interviewee _____
FAIA MA LE TAGATA MUAMUA NA FAATALANOAINA

3. Are you a matai? * Yes/IOE No/LEAI
PO O LAU SUSUGA O SE MATAI?

A1. How old were you when you left school? _____
PE O LEA LOU SOIFUAGA INA UA E TUUA LE AOGA?

A2. Was that from primary or secondary school, or tertiary education?
PO O LE AOGA TULAGA LUA, AOGA MAUALUGA, POO SE AOGA MAUALUGA ATU?

- a. primary school
AOGA TULAGA LUA
- b. secondary school
AOGA MAUALUGA
- c. tertiary education
AOGA MAUALUGA ATU

5. Since we visited you last in 1987, seven years ago, have any of the following changed?

TALU MAI LE TA FEILOAIGA I LE 1987, FITU TAUSAGA TALU AI, PE NA I AI NI SUIGA I MEA O LOO TAUA I LALO?

(14.) Ownership of the cattle herd?	Yes	No
LAFU MANU PAPALAGI TOTINO?	IOE	LEAI

If YES, who owns them now and why?

AFAI O LEA, O AI E ONA MANU I LE TAIMI NEI MA AISEA FOI?

a. Has your workplace or work situation changed?

PE NA I AI SE SUIGA I LE NOFOAGA FAIGALUEGA	Yes	No
POO LE TULAGA FOI TAU LE GALUEGA?	IOE	LEAI

If YES, in what way?

AFAI O LEA, I LEA LE ITU?

b. Do the same people look after the cattle?	Yes	No
PE O TAGATA LAVA E TASI IA O LOO VAAIA MANU?	IOE	LEAI

If NO, Who looks after them now?

AFAI E LEAI, O AI O LOO IA VAAIA I LE TAIMI NEI?

6.c. Do you live in a different place?	Yes	No
PO O ALAALA LAU SUSUGA I SE ISI NOFOAGA?	IOE	LEAI

If YES, Where do you live now?

AFAI O LEA, O FEA O LOO E ALAALA AI NEI?

Have any of the following about the land you use for your cattle changed?

PE NA I AI SE SUIGA I MEA O LOO TAUA I LALO E UIGA I LE FANUA O LOO FAAAOGAINA I LE FAATOAGA LAFU MANU PAPAPLAGI?

7. a. location	Yes	No
NOFOAGA	IOE	LEAI

8. b. size/area	Yes	No
TELE/FANUA	IOE	LEAI

9,10.c. ownership or control	Yes	No
MANU TOTINO POO LE PULEA	IOE	LEAI

11. d. your access to it/ difficulty keeping it	Yes	No
O LOU AVANOA I MANU/ FAIGATA ONA TAUSIA	IOE	LEAI

If YES, please explain / AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI

A3. Now some deeper questions. Could you please tell me what it means to you to keep (farm) cattle?

O NAI FESILI LOLOTO. E MAFAI ONA E TAUA MAIA FAAMOLEMOLE PO O LE A LE LAGONA I LAU SUSUGA O LE TAUSIA LEA O MANU PAPAPLAGI?

A4. What have you found to be the benefits, if any, of farming cattle?

PE NA MAUA E LAU SUSUGA NI ITU LELEI, PE AFAI NA I AI, I LENEI ATINAE?

A5. How would you compare cattle to other sources of family income?

O LEA SAU FAATUSA ATU I MANU PAPALAGI MA ISI VAEGA ESEESE I LE TULAGA O TUPE MAUA MAI A LE AIGA?

A6. Have cattle met or exceeded your expectations? Why?

O A NI AUALA NA E MAUA MAI I AU MANU PAPALAGI E PEI ONA FUAFAUINA PE SILI ATU FOI NAI LO AU FUAFUAGA NA I AI? AISEA?

A7. In what ways have cattle or cattle farming disappointed you? Why?

O A NI AUALA NA FAALEFIAFIA I AI LAU SUSUGA MAI AU MANU PAPALAGI POO LAU ATINAE MANU PAPALAGI FOI? AISEA?

A8. Is there anything about cattle or resulting from cattle that you never expected?

PE I AI SE MEA E UIGA I AU MANU PAPALAGI NA OO I AI POO SE MEA FOI NA MAUA MAI I AU MANU SA LEI MAFAUFAUINA E LAU SUSUGA E OO I AI?

A9. What changes in cattle farming generally have you noticed in recent years? Why?

O A SUIGA NA I AI LE ATINAE NA E SILAFIA I LE FITU TAUSAGA TALU AI?

p.t.o

27. Have any of the following influenced your attitude to cattle farming since 1987?. (Rank top 3 if possible, tick any others)

PE NA I AI SE FESUIAIGA I LOU MAFAUFAU MAI MEA UA TAUA I LALO
E UIGA I LE FAATOAGA LAFU MANU PAPAPLAGI TALU MAI LE 1987?

- a. The recent import of cattle from Australia by the government
O LE AUINA MAI O MANU PAPALAGI TALU AI NEI E LE MALO MAI
AUSEDALIA
- b. Training or support from the Livestock Section
AOGA FAATAITAI POO LE FESOASOANI MAI LE VAEGA O LAFU MANU
O LE OFISA O FAATOAGA.
- c. The good income from cattle
LELEI LE TUPE MAUA MAI MANU PAPALAGI
- d. The poor income from cattle
FAALELELI LE TUPE MAUA MAI MANU PAPAPLAGI
- e. Difficulties farming cattle
eg. escaping and stealing
O FAAFITAUILI TULAI MAI PEI O LE SOSOLA O MANU MA LE GAOI
- f. Low growth and breeding rates
MAUALALO O LE TUPU MA LE FAAOLAOLAINA
- g. Family pressures
FAATAUANAU MAI LE AIGA
- h. Increased status from having cattle
FAAEAINA O LE TULAGA FAALETAGATA
- i. The two cyclones
O AFA E LUA UA TUANAI ATU
- j. The taro blight
FAAMAI LEGA I LE TALO
- k. Other/NISI MEA _____
- l. Nothing
LEAI SE MEA

Please expand on the one that has influenced you most
FAAMOLEMOLE FAAMATALA FAALAUAI TELE MAI LE VAEGA PITO I TAUA I LOU
MANATU MAI MEA O LOO TAUA I LUGA

25-26. Would you say that your attitude to cattle farming is now more positive, the same, more negative or different since 1987?

PO O LEA LOU LAGONA I LE TAIMI NEI I LENEI ATINAE UA E SILAFIA E I AI SOU FAANAUNAUGA, TULAGA TUTUSA, E LEAI SE FAANAUNAUGA O I AI PO UA I AI FOI SE ESESEGA TALU MAI LE 1987?

- a. more positive
FAANAUNAUGA
- b. the same
TULAGA TUTUSA
- c. more negative
LEAI SE FAANAUNAUGA
- d. different/other
ESESEGA/NISI MEA

Why?/AISEA? _____

19. What is your most important plan/goal for your cattle now?

O LEA LAU FUAFUAGA/ SINI AUTU PITO I TAUUA MO AU MANU PAPAPLAGI I LE TAIMI NEI? FAATULAGA MAI FAAMOLEMOLE

- a. No specific goal
LEAI SE FUAFUAGA MAUTU/SINI MAOTI
- b. To increase numbers
IA FAATELEINA LE AOFAI O MANU
- e. To increase growth rate per animal
IA FAATELEINA LE TUPU I LE MANU E TASI
- f. To increase the number of calves born
IA FAATELEINA LE NUMERA O TAMAIPOVI FANANAU
- g. To contribute to faalavelave
IA I AI SE SAO I FAALAVELAVE
- h. To support the family
IA LAGOLAGO LE AIGA
- c. To become a full-time cattle farmer
IA AVEA MA FAILAFU MANU PAPALAGI ATOATOA
- d. Other/NISI MEA _____

20. When we visited in 1987 your goal was to _____*

I LE TATOU FEILOAIGA I LE 1987 O LAU FUAFUAGA POO LE SINI NA I AI O LE _____

Since then have you achieved your original goal?

TALU MAI LA LEA TAIMI PE UA FAATAUNUU LA LE ULUAI SINI

- | | | |
|-----|-----------------|------|
| Yes | Progressing | No |
| IOE | O LOO FAAAUU PE | LEAI |

23a. Did you ever go to zero over this time? Yes No
 PE SA OO INA LEAI SE MANU I LEA VAITAIMI? IOE LEAI

If YES, Why did you start again?
 AFAI O LEA, AISEA NA TOE AMATA AI? _____

23b. Minimum herd size during this time?
 NUMERA MAUALALO NA I AI I LEA TAIMI? _____

23c. Maximum herd size during this time?
 NUMERA MAUALUGA NA I AI I LEA TAIMI? _____

24. What are the most significant reasons for the dips?
 O A MAFUAGA TAUA O LE FAAITIITA O MANU? Rank/TULAGA Due to cyclones?
 MAI AFA?

- a. Slaughter for income _____
- FASIMATE MO SE TUPE MAUA
- b. Stealing/GAOIA _____
- c. Slaughter for faalavelave _____
- FASIMATE MO FAALAVELAVE
- d. Deaths _____
- MATE (_____)
- e. Cattle escaping _____
- MANU SOSOLA/LEILOLOA
- f. You leaving the farm _____
- O LOU TUUA O LE FAATOAGA
- g. Other/NISI MEA _____ _____

24.b. What are the most significant reasons for the rises?
 O A MAFUAGA TAUA O LE FAATUPULAIA O MANU?

- a. Buying more cattle _____
- TOE FAATAUINA MAI O NISI MANU
- b. Calves born on the farm _____
- TAMAIPOVI FANANAU I LE FAATOAGA
- c. Cattle from Australia _____
- MANU PAPALAGI MAI AUSETALIA
- d. Other/NISI MEA _____ _____

Alla. What breeds of cattle do you have?
 O A AU ITUAIGA MANU PAPALAGI O I AI?

- a. Old type/Hereford/Fresian
- b. Brahman/Braford
- c. Droughtmaster/'Australian'
- d. Other/NISI MEA _____

Allb. If more than one (1), Do you notice any differences between them, eg. ease of management or breeding.

AFAI E SILI ATU I LE TASI (1), PE I AI SE ESESEGA, PEI O LE VAAIGA POO LE FAAOLAOLAINA?

Allc. Which do you prefer and why?

O LE FEA LE ITUAIGA E LOTO I AI LAU SUSUGA MA AISEA LEA?

I'd like to ask some questions about faalavelave now

E I AI NAI FESILI OU TE FIA FESILI ATU AI I LE ITU TAU FAALAVELAVE I LE TAIMI NEI

43-44a. Do you think your attitude to faalavelave has changed in any way since 1987?

PE UA I AI SE SUIGA UA LAGONA E LAU SUSUGA E UIGA I FAALAVELAVE I SOO SE AUALA TALU MAI LE 1987?

Yes/IOE

No/LEAI

If YES, Please explain

AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI _____

b. Has your contribution of cattle to faalavelave changed in any way? (eg. do you give more, less, or to different occasions?)

PE UA I AI SE SUIGA I SOO SE AUALA I LAU SUSUGA I LE FAAOAGAINA LEA O AU MANU PAPALAGI I FAALAVELAVE? (eg. PE TELE LE NUMERA E FAAOGA, PE LAITIITI POO ITUAIGA FAALAVELAVE?)

c. What changes have happened to fa'alavelave because cattle have been incorporated into them? (For example are cattle replacing other things such as pigs?) O A NI SUIGA UA IAI I FAALAVELAVE INA UA FAAAOGA MANU PAPALAGI? (Mo se faataitaiga pe ua faaoga manu papalagi e sui mai isi mea pei o mea-i-tuaolo?)

45. Do you have any of your herd "ready" for faalavelave in your mind

PO UA I LE MAFAUFAU O LAU SUSUGA SE MANU POO MANU PAPALAGI FOI UA FUAFUA MO FAALAVELAVE MAI LAU ATINAE MANU PAPALAGI?

Yes/IOE

No/LEAI

45b. Which cattle do you choose to kill for faalavelave?

O A ITUAIGA MANU PAPALAGI E TE FILIFILIA E FASIMATE MO SE FAALAVELAVE?

How many (pigs)?/E FIA? _____

49. How did you feel about killing cattle for this faalavelave?
O LE A SOU LAGONA I LE FASIMATEA O MANU PAPALAGI MO IA
FAALAVELAVE?

- a. Pleased you could contribute/satisfied
FIAFIA UA MAFAI ONA FESOASOANI/FAAMALIEINA
- b. Neutral (eg. duty/to be expected)
LE AFAINA (eg. TIUTE/PEI ONA FUAFUAINA)
- c. Disappointed/felt 'obliged'
FAALEFIAFIA ONA PEI O SE MEA E TATAU ONA FAI
- d. Angry that you were forced to
TOATAMAI ONA UA FAAMALOSIA LAU SUSUGA
- e. Other/ NISI MEA _____
(go back to Q.50)

A12. When did you last receive a piece of beef from a faalavelave?
O ANAFEA LE TAIMI NA MAUA MAI AI SE AANO O LE MANU PALAGI
MAI SE FAALAVELAVE

Year/TAUSAGA _____ Month/MASINA _____

A13. What was the occasion?
O LEA LE ITUAIGA FAALAVELAVE? _____

A14. How did you distribute it in your family? (ie. who ate it?)
SA FAAFEFEA ONA FAASAFUA I LOU AUAIGA? (ie. O AI NA TAUMAFI AI?)

A15. Are faalavelave a constraint on or a motivation for your
cattle farming, or do they have a neutral effect?
PE UA AVEA FAALAVELAVE MA PA PUIPUIA PO O LE FAAOSOFIA O LE
AGAGA FIA FAI ATINAE MANU PAPALAGI, PO O LE LE AFAINA LEA?

- a. a constraint
O SE PA PUIPUIA LEA
- b. a motivation
FAAOSOFIA O LE AGAGA
- c. neutral effect
E LE AFAINA

A18. How would you describe a successful cattle farmer?
E FAAPEFEA ONA E FAAMATALAINA LE FAILAFU MANU PAPALAGI MANUIA?

A19. Would you describe yourself as a successful cattle farmer?
I LOU MANATU UA AVEA LAU SUSUGA O SE FAILAFU MANU PAPALAGI
MANUIA?

Yes	No	Don't know	Other
IOE	LEAI	LE SILAFIA	NISI MEA

A20. How important is success to you?
O LEA LE TAUA O LE MANUIA I LAU SUSUGA?

A21. How do you think you compare with other cattle farmers?
Please explain.
O LEA SOU MANATU PEA FAATUSA ATU LAU SUSUGA I ISI FAIFAATOAGA
MANU PAPALAGI? FAAMOLEMOLE FAAMATALA MAI.

Finally, have you received cattle from the recent import of cattle
from Australia?

I LE VAEGA MULIMULI, PE NA MAUA E LAU SUSUGA NI MANU PAPALAGI I
MANU PAPALAGI IA NA AUINA MAI TALU AI NEI MAI AUSETALIA?

Yes/IOE	No/LEAI
---------	---------

Have you attended a Livestock Section training course?
PE SA AUAI LAU SUSUGA I SE AOAOGA NA FAAFOEINA E LE VAEGA O LAFU
MANU O LE OFISA O FAATOAGA?

Yes/IOE	No/LEAI
---------	---------

Thank you very much. Your answers have been very helpful.
FAAFETAI TELE LAVA I LAU SUSUGA. O TALI FOI UA TUUINA MAI E LAU
SUSUGA O SE FESOASOANI TELE LAVA LEA I LENEI SUESUEGA.

We have a small gift as a token of our appreciation.
O LOO I AI SI NA MEA-ALOFA FAATAUVAA FAALELAVA E FAAALI ATU AI
LE MA AGAGA FIAFIA MA LE FAAFETAI TELE LAVA E TUSA AI MA LE TALIA
FOI O LENEI TALOSAGA.

When would be most suitable to you for our second visit?
O LEA FOI UA TOE TUUINA ATU AI LE ISI TALOSAGA PO O LEA SE ISI
ASO ATOFAINA E TALAFEAGAI AI MA LAU SUSUGA TATOU TE TOE FEILOAI
AI MO LE VAEGA MULIMULI O LENEI LAVA SUESUEGA?

Telephone Number/NUMERA O LE TELEFONI: _____

Respondent Number

QUESTIONNAIRE 2A : To 1987 farmers with no cattle now

(2A: Had cattle in 1987 or started again since 1987 but none now)

1. Name/SUAFA _____
(original interviewee)4. Village (where cattle were)
ALAALAFAGA (FAATOAGA) _____Location of interview
NOFOAGA O LE FAATALAN _____

Date of interview _____

INTRODUCTION / UPU TOMUA

Talofa lava. In 1987 I visited you and asked you some questions about your cattle and your experiences as a cattle farmer.

TALOFA LAVA. I LE TATOU FEILOAIGA I LE 1987 SA FESILIGIA AI LAU SUSUGA E UIGA I AU MANU PAPALAGI ATOA AI MA LOU TOMAI I LENEI FOI ATINAE.

I am now doing research for my PhD degree at Massey University in New Zealand and would very much appreciate it if I could ask you some more questions about your experience with cattle.

O LOO FAI NEI LA AU SUESUEGA MO LOU FAAILOGA O LE FAAFOMAI FILOSOFIA I LE IUNIVESITE O MASSEY I NIU SILA MA E I AI LAVA LE AGAGA FAAFETAI ONA E I AI NAI ISI FESILI E FIA TALANOA ATU AI I LAU SUSUGA E TUSA AI MA LAU FAATOAGA LAFU MANU PAPALAGI.

Do you still have cattle?

PO O I AI PEA AU MANU PAPALAGI I LE TAIMI NEI?

Yes/IOE

No/LEAI

If NO, continue. If YES, administer Questionnaire 1

I hope that my study will contribute to a greater understanding of cattle farming in Samoa in the future and my findings will be made available to everyone who has contributed to them.

E I AI LAVA LE FAAMOEMOE O LENEI SUESUEGA O LEA I AI SONA SAO I LE MALAMALAMAGA ATILI I FAATOAGA LAFU MANU PAPALAGI I SAMOA I LE LUMANAI MA O IUGA E MAUA MAI I LENEI SUESUEGA E TUUINA ATU I SOO SE TASI E PEI O LAU SUSUGA O E NA FESOASOANI I LENEI TAUMAFAGA.

Be assured that all replies are absolutely confidential and no-one will be individually identified.

O TALI MA FAAMATALAGA UMA E MAUA MAI I LENEI SUESUEGA E PUIUPUIA LEA MA E LE FAAILOA ATU FOI I LATOU TAITOATASI O LOO AUAI I LENEI TAUMAFAGA.

Please do not hesitate to say if the meaning of any of the questions is unclear.

AFAI E I AI SE MEA E LE O MALAMALAMA AI I LE FESILI E MAFAI LAVA ONA TOE FAAFESILI MAI.

Please feel free to add any comments or opinions.

AFAI FOI E I AI NI FAAMATALAGA POO NI MANATU FOI E FIA FAAOPOPO MAI E LAU SUSUGA O LEA FAAPEA LAVA ONA TALIA MA LE FIAFIA.

Please correct me if any questions show a lack of understanding. FAAMOLEMOLE IA FAASAO MAI PE AFAI O I AI NI FESILI E LE TALAFEAGAI AI LONA FAAMALAMALAMAGA.

Some questions only need short answers but for others I would like to invite you to share with us the story of your own experience with cattle and what has been significant or meaningful to you, whether good or bad. Thank you.

E I AI FESILI E MANAOMIA AI NI TALII PUPUU A O ISI FOI E MANAOMIA AI FAAMATALAGA E UIGA I LOU ILOA I LAU FAATOAGA LAFU MANU PAPALAGI PE I AI SE MEA POO NI MEA TAUA UA E MAUA MAI AI, PE LELEI PE FAALELELI FOI. FAAFETAI LAVA.

A. Repeat Questionnaire to 1987 farmers

2. Are we interviewing the same person? Yes
 PE O LE TAGATA LAVA E TASI LEA E FAATALATALANOA? IOE

IF NOT: Details: a. Name
 AFAI E LEAI: AUILIILIGA:

b. Age/SOIFUAGA _____

c. Relationship to original interviewee _____
 FAIA MA LE TAGATA MUAMUA NA FAATALANOAINA

3. Are you a matai? *
 PO O LAU SUSUGA O SE MATAI? Yes/IOE No/LEAI

A1. How old were you when you left school? _____
 PE O LEA LOU SOIFUAGA INA UA E TUUA LE AOGA?

A2. Was that from primary or secondary school, or tertiary education?
 PO O LE AOGA TULAGA LUA, AOGA MAUALUGA, POO SE AOGA MAUALUGA ATU?

a. primary school
 AOGA TULAGA LUA

b. secondary school
 AOGA MAUALUGA

c. tertiary education
 AOGA MAUALUGA ATU

14a. Are your cattle all dead or does your herd belong to someone else now?

PE UA MAMATE UMA/SE VAEGA AU MANU PAPALAGI POO LAU LAFU MANU UA TUUINA ATU/FAATAU ESE ATU LEA I SE ISI TAGATA I LE TAIMI NEI?

a. all dead
 MAMATE UMA

b. herd belongs to someone else
 LAFU MANU UA TUUINA/FAATAU ESE ATU

- c. Some dead, depleted herd belongs to someone else
 MAMATE SE VAEGA, MA O LE AOFAI O MANU UA TOTOE UA
 TUUINA/FAATAU ESE ATU LEA

14b. If some or all belong to someone else, who owns them now and why?

AFAI NA O SE VAEGA POO MANU UMA FOI UA TUUINA/FAATAU ESE ATU LEA
 O AI LA E ONA MANU IA I LE TAIMI NEI?

14c. What are the main reasons you stopped farming cattle?

O A MAFUAGA MAUTU UA TAOFIA AI LE TOE FAIA O LAU ATINAE MANU
 PAPALAGI?

5. Since we visited you last in 1987, seven years ago, have any of the following changed?

TALU MAI LE TATOU FEILOAIGA I LE 1987, FITU TAUSAGA TALU AI,
 PE NA I AI NI SUIGA I MEA O LOO TAUA I LALO?

a. Has your workplace or work situation changed?

PE NA I AI SE SUIGA I LE NOFOAGA FAIGALUEGA	Yes	No
POO LE TULAGA FOI TAU LE GALUEGA?	IOE	LEAI

If YES, in what way?

AFAI O LEA, I LEA LE ITU?

6.c. Do you live in a different place?
 PO O ALAALA LAU SUSUGA I SE ISI NOFOAGA?

Yes	No
IOE	LEAI

If YES, Where do you live now?

AFAI O LEA, O FEA O LOO E ALAALA AI NEI?

Did any of the following about the land you used for your cattle change?

PE SA I AI NI SUIGA I MEA O LOO TAUA I LALO E UIGA I LE FANUA O
 LOO FAAAOGAINA I LE FAATOAGA LAFU MANU PAPAPLAGI?

7. a. location	Yes	No
NOFOAGA	IOE	LEAI
8. b. size/area	Yes	No
TELE/FANUA	IOE	LEAI
9,10.c. ownership or control	Yes	No
MANU TOTINO POO LE PULEA	IOE	LEAI
11. d. your access to it/ difficulty keeping it	Yes	No
O LOU AVANOA I MANU/ FAIGATA ONA TAUSIA	IOE	LEAI

If YES, a. please explain / AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI

b. Did any of these changes contribute to your stopping farming cattle? Please explain.

PO O NEI SUIGA SA AVEA LEA MA AUALA UA TAOFIA AI LE TOE FAIA O LAU LAFU MANU PAPALAGI? FAAMOLEMOLE FAAMATALA MAI.

A3. Now some deeper questions. Could you please tell me what it meant to you to keep (farm) cattle?

O NAI FESILI LOLOTO. E MAFAI ONA E TAUA MAIA FAAMOLEMOLE PO O LE A LE LAGONA I LAU SUSUGA O LE TAUSIA LEA O MANU PAPAPLAGI?

A4. What did you find to be the benefits, if any, of farming cattle?
PE NA MAUA E LAU SUSUGA NI ITU LELEI, PE AFAI NA I AI, I LENEI ATINAE?

A5. Can you tell me what you originally expected from cattle?

E MAFAI ONA TAU MAI O A NI MEA NA E MUAI FUAUFUAINA MAI E MAUA MAI I AU MANU PAPALAGI?

A6. In what ways did cattle meet or exceed your expectations? Why?

O A NI AUALA NA E MAUA MAI I AU MANU PAPALAGI E PEI ONA FUAUFUAINA PE SILI ATU FOI NAI LO AU FUAUFUAGA NA I AI? AISEA?

A7. In what ways did cattle or cattle farming disappoint you? Why?

O A NI AUALA NA FAALEFIAFIA I AI LAU SUSUGA MAI AU MANU PAPALAGI POO LAU ATINAE MANU PAPALAGI FOI? AISEA?

A8. Is there anything about cattle or resulting from cattle that you never expected?

PE I AI SE MEA E UIGA I AU MANU PAPALAGI NA OO I AI POO SE MEA FOI NA MAUA MAI I AU MANU SA LEI MAFAUFAUINA E LAU SUSUGA E OO I AI?

A8b. How did you feel about stopping farming cattle?

O LEA SE LAGONA I LAU SUSUGA INA UA LE TOE FAIA LAU ATINAE
MANU PAPALAGI?

A9. Can you please tell me more about your experience. Perhaps you could tell me a story from your experience.

E MAFAI ONA FAAMATALA ATILI MAI FAAMOLEMOLE LOU ILOA I LEA
ITU. ATONU PE FAI SAU TALA I LOU ILOA I LEA ITU.

A9b. Looking back, is there anything you would have done differently?

PEA TOE MAFAUFAU I TUA,E I AI SE MEA SA TATAU ONA E FAIA E
ESE MAI AI E UIGA I LAU ATINAE?

27. Have any of the following influenced your attitude to cattle farming since 1987?. (Rank top 3 if possible, tick any others)

PE NA I AI SE FESUIAIGA I LOU MAFAUFAU MAI MEA UA TAUA I LALO
E UIGA I LAU FAATOAGA LAFU MANU PAPAPLAGI TALU MAI LE 1987?

- a. The recent import of cattle from Australia by the government
O LE AUINA MAI O MANU PAPALAGI TALU AI NEI E LE MALO MAI
AUSSETALIA
- b. Training or support from the Livestock Section
AOGA FAATAITAI POO LE FESOASOANI MAI LE VAEGA O LAFU MANU
O LE OFISA O FAATOAGA.
- c. The good income from cattle
LELEI LE TUPE MAUA MAI MANU PAPALAGI
- d. The poor income from cattle
FAALELELEI LE TUPE MAUA MAI MANU PAPAPLAGI
- e. Difficulties farming cattle
eg. escaping and stealing
O FAAFITAUFI TULAI MAI PEI O LE SOSOLA O MANU MA LE GAOI
- f. Low growth and breeding rates
MAUALALO O LE TUPU MA LE FAAOLAOLAINA

- g. Family pressures
FAATAUANAU MAI LE AIGA
- h. Increased status from having cattle
FAAEAINA O LE TULAGA FAALETAGATA
- i. The two cyclones
O AFA E LUA UA TUANAI ATU
- j. The taro blight
FAAMAI LEGA I LE TALO
- k. Other/NISI MEA _____
- l. Nothing
LEAI SE MEA

Please expand on the one that has influenced you most
FAAMOLEMOLE FAAMATALA FAALAUATELE MAI LE VAEGA PITO I TAUA I LOU
MANATU MAI MEA O LOO TAUA I LUGA

25-26. Would you say that your attitude to cattle farming is now more positive, the same, more negative or different since 1987?
PO O LEA LOU LAGONA I LE TAIMI NEI I LENEI ATINAE UA E
SILAFIA E I AI SOU FAANAUNAUGA, TULAGA TUTUSA, E LEAI SE FAANAUNAUGA
O I AI PO UA I AI FOI SE ESESEGA TALU MAI LE 1987?

- a. more positive
FAANAUNAUGA
- b. the same
TULAGA TUTUSA
- c. more negative
LEAI SE FAANAUNAUGA
- d. different/other
ESESEGA/NISI MEA
-

19. Do you have any interest in starting cattle farming again?
PO O I AI SE LAGONA NAUNAU I LAU SUSUGA E TOE FAIA SE ATINAE
LAFU MANU PAPALAGI?

Yes/IOE

No/LEAI

Why/AISEA?/Why not/AISEA LEA?

What, was the impact of Cyclones Ofa and Val on your herd?
O LEA SE AFAINA NA OO I LAU LAFU MANU PAPALAGI TALU AI AFA
O "OFA" MA "VAL"? (if applicable)

How many were lost?
 E FIA MANU NA LEILOLOA? _____

How many were sold to pay for restoration?
 E FIA MANU NA FAATAU ATU E TOTOGI AI LE TOE _____
 FAALELEI O MEA NA FAATAMAIA E AFA?

20. When we visited in 1987 your goal was to _____*
 I LE TATOU FEILOAIGA I LE 1987 O LAU FUAFUAGA POO LE SINI NA
 I AI O LE _____

Since then have you achieved your original goal?
 TALU MAI LA LEA TAIMI PE UA FAATAUNUU LA LE ULUAI SINI

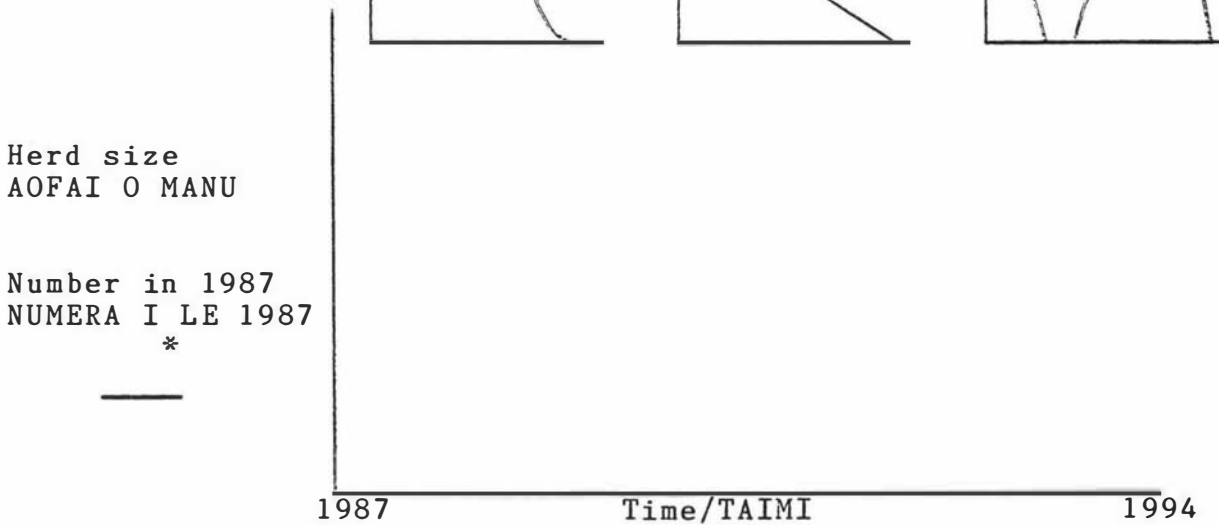
Yes/IOE

No/LEAI

23. Can we please graph the history of your cattle numbers since 1987.

E MAFAI ONA FAATULAGA MAI I SE ATA FAAMOLEMOLE LE TALA
 FAASOLOPITO O LE NUMERA O AU MANU PAPALAGI UA I AI TALU MAI LE
 1987.

For example:
 MO SE FAATAITAIGA:



23a. Did you ever go to zero over this time and start again?
 PE SA OO INA LEAI SE MANU I LEA VAITAIMI?

Yes/IOE

No/LEAI

If YES, Why did you start again?
 AFAI O LEA, AISEA NA TOE AMATA AI? _____

(23b. Minimum herd size = 0)

23c. Maximum herd size during this time?
 NUMERA MAUALUGA SA I AI I LEA TAIMI? _____

23d. What year did you go to zero? (most recently)
 O LEA LE TAUSAGA SA OO AI I LE LEAI SE MANU? _____

24. What are the most significant reasons for the dips?
 O A MAFUAGA TAUA O LE FAAITIITA O MANU?

		Rank/TULAGA	Due to cyclones? MAI AFA?
a. Slaughter for income FASIMATE MO SE TUPE MAUA	<input type="checkbox"/>	_____	<input type="checkbox"/>
b. Stealing/GAOIA	<input type="checkbox"/>	_____	<input type="checkbox"/>
c. Slaughter for faalavelave FASIMATE MO FAALAVELAVE	<input type="checkbox"/>	_____	<input type="checkbox"/>
d. Deaths MATE (_____)	<input type="checkbox"/>	_____	<input type="checkbox"/>
e. Cattle escaping MANU SOSOLA/LEILOLOA	<input type="checkbox"/>	_____	<input type="checkbox"/>
f. You leaving the farm O LOU TUUA O LE FAATOAGA	<input type="checkbox"/>	_____	<input type="checkbox"/>
g. Other NISI MEA _____	<input type="checkbox"/>	_____	<input type="checkbox"/>

24.b. What are the most significant reasons for the rises?
 O A MAFUAGA PITO TAUA O LE FAATUPULAIA O MANU?

		Rank/TULAGA	Source/ POGAI?
a. Buying more cattle TOE FAATAUINA MAI O NISI MANU	<input type="checkbox"/>	_____	_____
b. Calves born on the farm TAMAIPOVI FANANAU I LE FAATOAGA	<input type="checkbox"/>	_____	
c. Cattle from Australia MANU PAPALAGI MAI AUSETALIA	<input type="checkbox"/>	_____	
c. Other/NISI MEA _____	<input type="checkbox"/>	_____	

Alla. What breeds of cattle did you have?
 O A AU ITUAIGA MANU PAPALAGI SA I AI?

- a. Old type / Hereford / Fresian
- b. Brahman / Braford
- c. Droughtmaster / 'Australian'
- d. Other/NISI MEA _____

Allb. If more than one (1), Did you notice any differences between them, eg. ease of management or breeding.
 AFAI E SILI ATU I LE TASI (1), PE SA I AI SE ESESEGA I MANU,
 PEI O LE VAAIGA POO LE FAAOLAOLAINA FOI?

Allc. Which did you prefer and why?

O LE FEA LE ITUAIGA SA LOTO I AI LAU SUSUGA MA AISEA LEA?

28. Have you ever slaughtered heifer/s? Yes No
 PE NA FASIMATE EA NI POVI-TAANO? IOE LEAI

29a. Since our last visit in 1987, is your attitude to slaughtering heifers the same, or would you be more willing to or less willing to slaughter heifers?

TALU MAI LE TATOU FEILOAIGA I LE 1987, PO O TUMAU PEA LE LAGONA I LAU SUSUGA I LE FASIMATEA PEA LEA O POVI-TAANO, POO UA I AI SE FAANAUNAUGA POO LE LEAI FOI O SE FAANAUNAUGA E FASIMATE AI MANU IA?

a. the same
 O LOO TUMAU PEA

b. more willing to slaughter
 E I AI PEA LE FAANAUNAUGA E FASIMATE AI POVI-TAANO

c. less willing to slaughter
 E LEAI SE FAANAUNAUGA E FASIMATE AI POVI-TAANO

Why?/AISEA? _____

43-44a. Do you think your attitude to faalavelave has changed in any way since 1987?

PE UA I AI SE SUIGA UA LAGONA E LAU SUSUGA E UIGA I FAALAVELAVE I SOO SE AUALA TALU MAI LE 1987?

Yes/IOE No/LEAI

If YES, Please explain

AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI _____

46. When was the most recent time you slaughtered cattle for faalavelave?
 O ANAFEA LE TAIMI LATA MAI NA FASIMATE AI SE MANU MO SE FAALAVELAVE?

Month _____ Year _____
 (MASINA) (TAUSAGA)
 (Never/LEAI: Go to Q A12.)

50. When was the time before that, that you slaughtered cattle for faalavelave?
 O LEA LE ISI TAIMI MUAMUA ATU NA FASIMATE AI SE MANU MO SE FAALAVELAVE?

Month _____ Year _____
 (MASINA) (TAUSAGA)

47. What was the occasion?
 O LE A LE ITUAIGA FAALAVELAVE? _____

	Family relationship FAIA FAALEAIGA		Family relationship FAIA FAALEAIGA
a. Funeral MALIU	<input type="checkbox"/>		<input type="checkbox"/>

- b. Wedding
FAAIPOIPOGA _____ _____
- c. Fine
FAASALAGA _____ _____
(Reason/MAFUAGA _____)
- d. Overseas visitor
MALO MAI FAFO _____ _____
- e. Sua
SUA _____ _____
- f. Conferment of Title
SAOFAI _____ _____
- g. Other
NISI MEA _____ _____

48. How many cattle did you slaughter (total)?
E FIA MANU NA FASIMATE? (AOFAI) _____

Go to A12. below

48a. Type of animals slaughtered? ITUAIGA MANU NA FASIMATE? _____
Age TAUSAGA _____

Number of bulls
NUMERA O PULU _____

Old cows
AUMATUA MANU PAPALAGI UA LE TOE FANAFANAU _____

Breeding cows/heifers
AUMATUA MANU PAPALAGI FANAFANAU/ POVI-TAANO _____

48b. Did you contribute pigs also? PE SA FAAAOGA FOI MA MEA-I-TUAOLO? Yes IOE No LEAI

How many?/E FIA? _____

49. How did you feel about killing cattle for this?
O LE A SOU LAGONA I LE FASIMATEA O MANU PAPALAGI MO IA FAALAVELAVE?

- a. Pleased you could contribute/satisfied
FIAFIA UA MAFAI ONA FESOASOANI/FAAMALIEINA
- b. Neutral (eg. duty/to be expected)
LE AFAINA (eg. TIUTE/PEI ONA FUAFUAINA)
- c. Disappointed/felt 'obliged'
FAALEFIAFIA ONA PEI O SE MEA E TATAU ONA FAI
- d. Angry that you were forced to
TOATAMAI ONA UA FAAMALOSIA LAU SUSUGA

e. Other/NISI MEA _____

(go back to Q.50)

A12. When did you last receive a piece of beef from a faalavelave?
O ANAFEA LE TAIMI NA MAUA MAI AI SE AANO O LE MANU PALAGI
MAI SE FAALAVELAVE

Year/TAUSAGA _____ Month/MASINA _____

A13. What was the occasion?

O LEA LE ITUAIGA FAALAVELAVE? _____

A14. How did you distribute it in your family? (ie. who ate it?)

SA FAAFEFEA ONA FAASAFUA I LOU AUAIGA? (ie. O AI NA TAUMAFI AI?)

A15. Were faalavelave a constraint on or a motivation for your
cattle farming, or did they have a neutral effect?

PE SA AVEA FAALAVELAVE MA PA PUIPUIA POO LE FAAOSOFIA O LE
AGAGA FIA FAI ATINAE MANU PAPALAGI, POO LE LE AFAINA LEA?

a. a constraint
O SE PA PUIPUIA LEA

b. a motivation
FAAOSOFIA O LE AGAGA

c. neutral effect
E LE AFAINA

A17.a) Were your cattle fenced or tethered?

PE SA TUU I PA PE SA NONOA AU MANU PAPALAGI?

Fenced/ PA

Tethered/ NONOA

b) Did you have stockyards? Yes No
PE SA I AI SAU SITOKIA? IOE LEAI

c) How often, if ever, did you check they were O.K?
E FAAFIA, PEA FAI NA FAI, ONA SIAKI PO O LELEI MANU? _____

d) Did you give them any extra feed? (supplementary feeding)
PE SA FAFAGA AU MANU I NISI ITUAIGA MEA-AI? (ISI MEA-AI)

Yes/IOE

NO/LEAI

e) How often, if ever, did you shift them around?
E FAAFIA, PEA FAI NA FAI, ONA SIFI AU MANU? _____

f) What was their source of water?
O FEA E SAU AI LE VAI MO AU MANU? _____

Did you practice any of the following?.....

PE SA E FAIA NI GALUEGA UA TAUA I LALO?....

g) Management of mating? Yes No
VAAIGA O LE FEUSUAIGA? IOE LEAI

- | | | |
|---|------------|------------|
| h) Weaning of calves?
FAATEAINA O TAMAIPOVI MA LE SUSU? | Yes
IOE | No
LEAI |
| i) Castration of young bulls?
FOFOINA O TAMAIPOVI? | Yes
IOE | No
LEAI |
| j) Planting better pasture grasses?
TOTOINA O VAO LELEI? | Yes
IOE | No
LEAI |
| k) Weed control?
TOGAFITIA O LE VAO LEAGA? | Yes
IOE | No
LEAI |
| l) Disease prevention?
PUIPUIA MAI FAAMAI? | Yes
IOE | No
LEAI |

What were your major problems or sources of frustration?
O A FAAFITAU LI MATUIA SA FEAGAI AI MA LAU SUSUGA?

B7a. What was the impact of your cattle on your relations with the following people?
ONA O LAU SUSUGA O LE FAIFAA-TOAGA LAFU MANU PAPALAGI SA FAAFEFEA MAI LOU VA FEALOAI MA I LATOU UA TAUA I LALO?

Neighbouring cattle farmers?
FAILAFU MANU PAPALAGI E TUAOI?

Neighbours without cattle?
O TUAOI E LEAI NI MANU PAPALAGI?

Relatives with cattle?
AUAIGA E I AI MANU PAPALAGI?

Relatives without cattle?
AUAIGA E LEAI NI MANU PAPALAGI?

B7b. What was their attitude to your cattle?
O LEA SE LATOU VAAI MAI I AU MANU PAPALAGI?

Did you notice a change in relations with any of the above between when you had cattle and since you no longer have cattle? Please explain.

PE SA I AI SE SUIGA VAAIA I LE VA FEALOAI O LAU SUSUGA MA NISI O I LATOU UA TAUA I LUGA MAI LE TAIMI A O I AI AU MANU PAPALAGI SEIA OO MAI I LE TAIMI INA UA LEAI NI AU MANU? FAAMOLEMOLE FAAMATALA MAI.

B10. Do you think cattle have caused tension in the village?
PO O LOU MANATU UA AVEA MANU PAPALAGI MA FEVAEVAEAIGA I TOTONU O LE NUU?

Yes/IOE

Some/I NISI

No/LEAI

If YES, in what way? Please explain.

AFAI O LEA, I LEA LE AUALA? FAAMATALA MAI FAAMOLEMOLE.

B11. Have cattle caused a gap to widen between rich and poor families?

PE UA AVEA EA MANU PAPALAGI UA TUPU AI SE VA TELE I LE VA O AIGA MAUMEA MA AIGA MATITIVA?

Yes/IOE

No/LEAI

B12. Who has benefited the most from cattle and why?

O AI E TELE LE SELESELE MAI MANU PAPALAGI MA AISEA LEA?

B13. Who has benefited least from cattle and why?

O AI E LAITIITI LE SELESELE MAI MANU PAPALAGI MA AISEA LEA?

B14. Do you think a younger person with cattle is more likely to get a matai title?

I LOU MANATU O SE TAGATA TALAVOU E I AI NI ANA MANU PAPALAGI ATONU E MAUA SONA SUAFA MATAI?

Yes/IOE

No/LEAI

B15. Did you sometimes feel pressured by others?

PE I AI SE TAIMI E FAATAUANAU AI LAU SUSUGA MAI ISI?

Yes/IOE

No/LEAI

Please explain

FAAMOLEMOLE FAAMATALA MAI

B16. How did you manage all the expectations placed on you?
(Did you sometimes avoid eg. when asked to give cattle to
faalavelave. Can you give me an example?)

SA FAAFEFEA ONA E TAUAVEINA UMA FUAFUAGA AUTU SA TUUINA ATU
I LAU SUSUGA?(PE SA I AI SE TAIMI SA LE FAIA AI eg. PEA LE AVEA
SE MANU I SE FAALAVELAVE. E MAFAI ONA TAU MAI SE MEA NA TUPU?)

B29a. What did it mean to you to contribute a cattle beast to a
faalavelave? Please explain

O LEA LE UIGA SA I LAU SUSUGA O LE AVE LEA O SE MANU PALAGI
I SE FAALAVELAVE? FAAMOLEMOLE FAAMATALA MAI

B30. What do you think other people try to achieve when they
contribute a cattle beast?

O LEA SOU MANATU O LEA SE MEA E TAUMAFAI I LATOU IA E MAUA
MAI PE A AVE SE MANU PALAGI I SE FAALAVELAVE?

B31. Some people have cattle and some do not, but everyone has
pigs. Do you think this affects what it means to give a cattle
beast?

O ISI E I AI A LATOU MANU PAPALAGI A O ISI E LEAI, AO TAGATA
UMA TAITOATASI E I AI A LATOU MEA-I-TUAOLO. O LONA UIGA I LOU MANATU
E I AI SE AAFIAGA PE A AVE SE MANU PALAGI I SE FAALAVELAVE?

A16. How would you describe a successful cattle farmer?

E FAAPEFEA ONA E FAAMATALAINA LE FAILAFU MANU PAPALAGI MANUIA?

A17. Would you describe yourself as a successful cattle farmer?

I LOU MANATU UA AVEA LAU SUSUGA O SE FAILAFU MANU PAPALAGI
MANUIA?

Yes	'Yes and No'	No	Don't know	Other
IOE	'IOE MA LE LEAI'	LEAI	LE SILAFIA	NISI MEA

A18. How important is success to you?

O LEA LE TAUA O LE MANUIA I LAU SUSUGA?

A19. How do you think you compare with other cattle farmers?
Please explain.

O LEA SOU MANATU PEA FAATUSA ATU LAU SUSUGA I ISI FAIFAATOAGA
MANU PAPALAGI? FAAMOLEMOLE FAAMATALA MAI.

Have you attended a Livestock Section training course?

PE SA AUAI LAU SUSUGA I SE AOAOGA NA FAAFOEINA E LE VAEGA O LAFU
MANU O LE OFISA O FAATOAGA?

Yes/IOE

No/LEAI

Thank you very much. Your answers have been very helpful.

FAAFETAI TELE LAVA I LAU SUSUGA. O TALI FOI UA TUUINA MAI E LAU
SUSUGA O SE FESOASOANI TELE LAVA LEA I LENEI SUESUEGA.

We have a small gift as a token of our appreciation.

O LOO I AI SINA MEA-ALOFA FAATAUVAA FAALELAVA E FAAALI ATU AI LE
MA AGAGA FIAFIA MA LE FAAFETAI TELE LAVA E TUSA AI MA LE TALIA
FOI O LENEI TALOSAGA.

Respondent Number

QUESTIONNAIRE 2B : To 1987 farmers with no cattle
(2B: Had no cattle in 1987 and since 1987)

1. Name/SUAFA _____
(original interviewee)

4. Village (where cattle were) _____
ALAALAFAGA (FAATOAGA)

Location of interview _____
NOFOAGA O LE FAATALAN

Date of interview _____

INTRODUCTION / UPU TOMUA

Talofa lava. In 1987 I visited you and asked you some questions about your cattle and your experiences as a cattle farmer.

TALOFA LAVA. I LE TATOU FEILOAIGA I LE 1987 SA FESILIGIA AI LAU SUSUGA E UIGA I AU MANU PAPALAGI ATOA AI MA LOU TOMAI I LENEI FOI ATINAE.

I am now doing research for my PhD degree at Massey University in New Zealand and would very much appreciate it if I could ask you some more questions about your experience with cattle.

O LOO FAI NEI LA AU SUESUEGA MO LOU FAAILOGA O LE FAAFOMAI FILOSOFIA I LE IUNIVESITE O MASSEY I NIU SILA MA E I AI LAVA LE AGAGA FAAFETAI ONA E I AI NAI ISI FESILI E FIA TALANOA ATU AI I LAU SUSUGA E TUSA AI MA LAU FAATOAGA LAFU MANU PAPALAGI.

In 1987 you had no cattle. Have you had any cattle since then?

I LE 1987, E LE I AI NI AU MANU PAPALAGI, PE NA I AI LA NI AU MANU PAPALAGI TALU MAI LENA TAIMI?

Yes/IOE

No/LEAI

If NO, continue. If YES, administer Questionnaire 1 (cattle now)
or Questionnaire 2A (no cattle now)

I hope that my study will contribute to a greater understanding of cattle farming in Samoa in the future and my findings will be made available to everyone who has contributed to them.

E I AI LAVA LE FAAMOEMOE O LENEI SUESUEGA O LEA I AI SONA SAO I LE MALAMALAMAGA ATILI I FAATOAGA LAFU MANU PAPALAGI I SAMOA I LE LUMANAI MA O IUGA E MAUA MAI I LENEI SUESUEGA E TUUINA ATU I SOO SE TASI E PEI O LAU SUSUGA O E NA FESOASOANI I LENEI TAUMAFAGA.

Be assured that all replies are absolutely confidential and no-one will be individually identified.

O TALI MA FAAMATALAGA UMA E MAUA MAI I LENEI SUESUEGA E PUIUPUIA LEA MA E LE FAAILOA ATU FOI I LATOU TAITOATASI O LOO AUAI I LENEI TAUMAFAGA.

Please feel free to add any comments or opinions.

AFAI FOI E I AI NI FAAMATALAGA POO NI MANATU FOI E FIA FAAOPOPO MAI E LAU SUSUGA O LEA FAAPEA LAVA ONA TALIA MA LE FIAFIA.

A. Repeat Questionnaire to 1987 farmers

2. Are we interviewing the same person? Yes
 PE O LE TAGATA LAVA E TASI LEA E FAATALATALANO? IOE

IF NOT: Details: a. Name

AFAI E LEAI: AUILIILIGA: _____

b. Age/SOIFUAGA _____

c. Relationship to original interviewee _____

FAIA MA LE TAGATA MUAMUA NA FAATALANŌAINA

3. Are you a matai? * Yes/IOE No/LEAI
 PO O LAU SUSUGA O SE MATAI?

A1. How old were you when you left school? _____
 PE O LEA LOU SOIFUAGA INA UA E TUUA LE AŌGA?

A2. Was that from primary or secondary school, or tertiary education?
 PO O LE AOGA TULAGA LUA, AOGA MAUALUGA, POO SE AOGA MAUALUGA ATU?

a. primary school b. secondary school
 AOGA TULAGA LUA AOGA MAUALUGA

c. tertiary education
 AOGA MAUALUGA ATU

25-26. Would you say that your attitude to cattle farming is now more positive, the same, more negative or different since 1987?

PO O LEA LOU LAGONA I LE TAIMI NEI I LENEI ATINAE UA E
 SILAFIA E I AI SOU FAANAUNGA, TULAGA TUTUSA, E LEAI SE FAANAUNGA
 O I AI PO UA I AI FOI SE ESESEGA TALU MAI LE 1987?

a. more positive b. the same
 FAANAUNGA TULAGA TUTUSA

c. more negative
 LEAI SE FAANAUNGA

d. different/other _____
 ESESEGA/NISI MEA

19. Do you have any interest in starting cattle farming again?
 PO O I AI SE LAGONA NAUNAU I LAU SUSUGA E TOE FAIA SE ATINAE
 LAFU MANU PAPALAGI?

Yes/IOE No/LEAI

Why/AISEA?/Why not/AISEA LEA? _____

Why haven't you started again?
 AISEA NA LE TOE AMATA AI? _____

43-44a. Do you think your attitude to faalavelave has changed in any way since 1987?

PE UA I AI SE SUIGA UA LAGONA E LAU SUSUGA E UIGA I
FAALAVELAVE I SOO SE AUALA TALU MAI LE 1987?

Yes/IOE

No/LEAI

If YES, Please explain

AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI _____

A12. When did you last receive a piece of beef from a faalavelave?
O ANAFEA LE TAIMI NA MAUA MAI AI SE AANO O LE MANU PALAGI
MAI SE FAALAVELAVE

Year/TAUSAGA _____

Month/MASINA _____

A13. What was the occasion?

O LEA LE ITUAIGA FAALAVELAVE? _____

A14. How did you distribute it in your family? (ie. who ate it?)

SA FAAFEFEA ONA FAASAFUA I LOU AUAIGA? (ie. O AI NA TAUMafa AI?)

B7a. What are your relations with the following people?

O FAAFEFEA MAI LOU VA FEALOA I MA I LATOU UA TAUA I LALO?

Neighbouring cattle farmers?

FAILAFU MANU PAPALAGI E TUAOI? _____

Neighbours without cattle?

O TUAOI E LEAI NI MANU PAPALAGI? _____

Relatives with cattle?

AUAIGA E I AI MANU PAPALAGI? _____

Relatives without cattle?

AUAIGA E LEAI NI MANU PAPALAGI? _____

Did you notice a change in relations with any of the above
between when you had cattle and since you no longer have cattle?
Please explain.

PE SA I AI SE SUIGA VAAIA I LE VA FEALOA I O LAU SUSUGA MA NISI
O I LATOU UA TAUA I LUGA MAI LE TAIMI A O I AI AU MANU PAPALAGI
SEIA OO MAI I LE TAIMI INA UA LEAI NI AU MANU? FAAMOLEMOLE FAAMATALA
MAI.

B10. Do you think cattle have caused tension in the village?

PO O LOU MANATU UA AVEA MANU PAPALAGI MA FEVAEVAEAIGA I TOTONU

O LE NUU?

Yes/IOE

Some/I NISI

No/LEAI

If YES, in what way? Please explain.

AFAI O LEA, I LEA LE AUALA? FAAMATALA MAI FAAMOLEMOLE.

B11. Have cattle caused a gap to widen between rich and poor families?

PE UA AVEA EA MANU PAPALAGI UA TUPU AI SE VA TELE I LE VA O AIGA MAUMEA MA AIGA MATITIVA?

Yes/IOE

No/LEAI

B12. Who has benefited the most from cattle and why?

O AI E TELE LE SELESELE MAI MANU PAPALAGI MA AISEA LEA?

B13. Who has benefited least from cattle and why?

O AI E LAITIITI LE SELESELE MAI MANU PAPALAGI MA AISEA LEA?

B14. Do you think a younger person with cattle is more likely to get a matai title?

I LOU MANATU O SE TAGATA TALAVOU E I AI NI ANA MANU PAPALAGI ATONU E MAUA SONA SUAFA MATAI?

Yes/IOE

No/LEAI

B30. What do you think other people try to achieve when they contribute a cattle beast to a faalavelave?

O LEA SOU MANATU O LEA SE MEA E TAUMAFAI I LATOU IA E MAUA MAI PE A AVE SE MANU PALAGI I SE FAALAVELAVE?

B31. Some people have cattle and some do not, but everyone has pigs. Do you think this affects what it means to give a cattle beast to a faalavelave?

O ISI E I AI A LATOU MANU PAPALAGI A O ISI E LEAI, AO TAGATA UMA TAITOATASI E I AI A LATOU MEA-I-TUAOLO. O LONA UIGA I LOU MANATU E I AI SE AAFIAGA PE A AVE SE MANU PALAGI I SE FAALAVELAVE?

Thank you very much. Your answers have been very helpful. FAAFETAI TELE LAVA I LAU SUSUGA. O TALI FOI UA TUUINA MAI E LAU SUSUGA O SE FESOASOANI TELE LAVA LEA I LENEI SUESUEGA.

QUESTIONNAIRE 1,B

Respondent Number

Questions on cattle in the culture/social impact

FESILI AGAI I MANU PAPALAGI I LE ITU TAU LE AGANUU

B1a. Who is involved in working farming the cattle?
O AI E FEAGAI MA LE GALUEAINA O MANU PAPALAGI?

Family (relationship) or non family?
AIGA (FAIA) POO SE TAGATA ESE? _____

Approx age
SOIFUAGA _____

Titled or untitled?
MATAI POO SE TAULEALEA?

B1b. How many people is that?
PE TOAFIA I LATOU IA? _____

B2. How do they benefit from working for you?
FAAFEFEA ONA MAUA MAI SE MEA LELEI A I LATOU IA E GALULUE MO
LAU SUSUGA?

a. wages If wages, How much do you pay them?
TOTOGI PE FIA LE TOTOGI O I LATOU IA?

b. supported by the income _____
FAALAGOLAGO I LE TUPE MAUA

c. increased personal status
FAAEAINA LE TULAGA FAALETAGATA

d. increased family status
FAAEAINA LE TULAGA O LE AIGA

e. other/ NISI MEA _____

B3. If anyone has received any training (_____*), who was that?
AFAI E I AI SE TASI NA AUAI I SE AOAOGA, O AI LA LEA?

a. owner/O LE ONA MANU

b. worker/TAGATA FAIGALUEGA

c. owner and worker are the same person
O LE ONA MANU MA LE TAGATA FAIGALUEGA O LE TAGATA LAVA E TASI

B4. You have told me that _____ owns the cattle.
Is that because (you/that person)
SA E TAUA MAI O _____ E ONA MANU PAPALAGI. O LONA UIGA EA (O
LAU SUSUGA/LE ISI TAGATA).....

a. paid for them
SA TOTOGIA MANU

b. signed the contract
SA SAINIA LE FEAGAIGA

c. is/are the matai
O LE/O MATAI

d. other reason _____
SE ISI MAFUAGA

B5.a. Who makes the buying and selling decisions?
 O AI E FAIA TONU
 I LE FAATAUINA MAI
 MA LE FAATAUINA ATU?

b. Who makes the farm management decisions?
 O AI E FAIA TONU
 I LE PULEA O LE
 FAATOAGA?

c. Who makes the killing for faalavlave decisions?
 O AI E FASIMATEA
 MANU MO TONU I
 FAALAVELAVE?

The owner
 O LE ONA MANU

Someone else
 (who?)
 O LE ISI TAGATA (O AI?) _____

B6. Does conflict or tension ever arise over these decisions? (eg. between owner and worker?)
 PE I AI SE FEESESEEAIGA E ALIALI MAI I NEI TONU? (eg. I LE VA
 O LE ONA MANU MA LE TAGATA FAIGALUEGA?)

Yes No
 IOE LEAI

Yes No
 IOE LEAI

Yes No
 IOE LEAI

If Yes, please explain
 AFAI O LEA, FAAMOLEMOLE FAAMATALA MAI _____

B7. What are your relations with neighbours and relatives with cattle?
 O A MAI LOU VA FEAGAI AI MA OU TUAOI MA OU AIGA E UIGA I MANU
 PAPALAGI?

B8. Is there any difference compared to your relations with neighbours and relatives without cattle?.....(what is their attitude to your cattle?)
 PE I AI SE ESESEGA PEA FAATUSA ATU I LOU VA FEAGAI AI MA OU TUAOI
 MA OU AIGA E LEAI NI A LATOU MANU PAPALAGI?....(O LEA LE LATOU
 VAAI MAI I AU MANU PAPALAGI?)

B9. Do you think relations between people has changed over the last few years in any way because of cattle?
 I LOU MANATU PE MATA UA I AI SE SUIGA I NAI TAUSAGA UA MAVAE
 I SOO SE ITU I LE VA FEAGAI AI O TAGATA TALU AI MANU PAPALAGI?

Yes/IOE

No/LEAI

Don't Know/LE ILOA

If YES, in what way?
 AFAI O LEA, I LEA LE ITU? _____

B10. Do the cattle farmers in your village, cooperate in any way?....
 PE FELAGOLAGOMAI LE AU FAILAFU MANU PAPALAGI, I SOO SE ITU
 I LOU NUU?.....

a. Do you (plural) share information or experience?
 PE TOU TE FETUFAAI I FAAMATALAGA POO LE MALAMALAMA FOI TAU I MANU
 PAPALAGI?

b. Is there any communal grazing?
 PE O I AI SE TUUFAATASIGA ATOA O MANU PAPALAGI E VAAI MA TAUSI
 FAATASI E LE NUU?

c. Do you buy and sell or exchange cattle between each other?
 PE O I AI SE FEFAATAUAIGA POO NI FESUIAIGA FOI I MANU PAPALAGI
 I LE VA O LE AUFAILAFU MANU PAPALAGI?

d. Other
 NISI MEA _____

B11. Have you ever experienced anyone.....
 PE NA I AI SE ISI NA.....

a. harming your cattle? FAAMANUALIA AU MANU PAPALAGI?	Yes IOE	No LEAI
b. breaking your fences? FAALEAGAINA AU PA?	Yes IOE	No LEAI
c. stealing your cattle? GAOIA AU POVIF?	Yes IOE	No LEAI

If YES, who and why?
 AFAI O LEA, O AI MA AISEA? _____

B12. Do you think cattle have caused tension in any way?
 PO O LOU MANATU UA AVEA MANU PAPALAGI UA TUPU AI SE FEESESEAIGA
 I SOO SE ITU?
 Yes/IOE Some/I NISI No/LEAI

If YES, in what way? Please explain.
 AFAI O LEA, I LEA LE ITU? FAAMATALA MAI FAAMOLEMGLA.

B13. Have cattle caused a gap to widen between rich and poor
 families?
 PE UA AVEA EA MANU PAPALAGI UA TUPU AI SE VA TELE I LE VA O
 AIGA MAUMEA MA AIGA MATITIVA?

Yes/IOE No/LEAI

B14. Do you think a younger person with cattle is more likely to get a matai title?

I LOU MANATU O SE TAGATA TALAVOU E I AI NI ANA MANU PAPALAGI ATONU E MAUA SONA SUAFA MATAI?

Yes/IOE

No/LEAI

If YES, is that because of the cattle or because he is better at providing for his family generally?

AFAI O LEA, PE MATA ONA E I AI ANA MANU PAPALAGI POO LE LELEI O LE TAUSIGA O LONA AIGA?

a. Because of the cattle
ONA O MANU PAPALAGI

b. Because better provider generally
ONA O LE LELEI O LE TAUSIGA O LE AIGA

c. Other reason
SE ISI MAFUAGA _____

B15. Do you sometimes feel pressured by others?

PE I AI SE TAIMI E TE LAGONA AI SE FAATAUANAU MAI A NISI?

Yes/IOE

No/LEAI

Please explain

FAAMOLEMOLE FAAMATALA MAI _____

B16. How do you manage all the expectations placed on you?

(Do you sometimes avoid eg. when asked to give cattle to faalavelave. Can you give me an example?)

E FAAFEFEA ONA E TAUAVEA FUAFUAGA UMA UA TUU ATU I LAU SUSUGA?

(PE I AI SE TAIMI E LE FAIA AI eg. PEA LE AVEA SE MANU I SE FAALAVELAVE. E MAFAI ONA TAU MAI SE MEA NA TUPU?)

B17. In a faalavelave, how many of the following do you think one cattle beast would be exchanged for?

I SE FAALAVELAVE FAI, TUSA E FIA NI MEA UA TAUA I LALO I FESUIAIGA MA LE MANU PALAGI E TASI I LOU MANATU?

a. How many fine mats?
E FIA NI IE-TOGA? _____

b. How much money?
E FIA SE TUPE? _____

c. How many pigs?
E FIA NI MEA-I-TUAOLO? _____

d. How many cartons of tinned fish?
E FIA NI PUSA-APA ELENI? _____

B18. Do you think cattle are now more important or less important than pigs in faalavelave?

I LE VAITAIMI NEI I LOU MANATU, PE MATA UA TAUA ATU MANU PAPALAGI POO LE LE TAUA TELE FOI NAI LO MEA-I-TUAOLO I FAALAVELAVE?

a. Cattle MORE important than pigs
TAUA ATU MANU PAPALAGI NAI LO MEA-I-TUAOLO

b. Cattle LESS important than pigs
E LE TAUA TELE MANU PAPALAGI I LO MEA-I-TUAOLO

B19. Why do you think this has happened? (that cattle have become more or less important in faalavelave)

AISEA I LOU MANATU UA FAAPEA AI? (ONA TAUA ATU POO LE LE TAUA TELE FOI O MANU PAPALAGI I FAALAVELAVE)

B20. Pigs are cooked but the cattle portions are not. Why do you think this is?

E FAAVELA MEA-I-TUAOLO (MANUFATA) AE AVE MATA I VAEGA MANU PAPALAGI I FAALAVELAVE? AISEA UA FAAPEA AI I LOU MANATU?

B21. If both pigs and cattle are available for presentation what will be given first (to the most important person)?

AFAI O I AI NI MEA-I-TUAOLO (MANUFATA) MA SE MANU PALAGI I SE FAALAVELAVE O LE FEA O MANU IA E MUAMUA AVE (I LE TAGATA PITO SILI ONA TAUA)?

a. pigs
MEA-I-TUOLO (MANUFATA)

b. cattle
MANU PALAGI

Why?/AISEA? _____

B22. What part of the body goes to the most important person? (eg. a pastor)
O LE FEA VAEGA E AVE I LE TAGATA PITO SILI ONA TAUA?
(eg FAIFEAU)

What part of the body goes to the next most important person? (eg. MP)
O LE FEA VAEGA E AVE I LE ISI TAGATA TAUA E SOSOO AI? (eg FAIPULE)

Pig _____
MEA-I-TUAOLO(MANUFATA)

Significance _____
TULAGA TAUA

Cattle beast _____
MANU PALAGI

Significance _____
TULAGA TAUA

B23. Why do you think that different parts of the body of a cattle beast are given compared to pigs?

I LOU MANATU AISEA E AVE AI I VAEGA LE MANU PALAGI PE A FAATUSA ATU I MEA-I-TUAOLO (MANUFATA)?

B24. Why do you think some but not all of the traditions regarding pigs have been transferred to cattle?

AISEA UA E MANATU AI O NISI AE LE O AGANUU UMA MAI ANAMUA E FAAAOGA AI MEA-I-TUAOLO UA TUU ATU LEA I MANU PAPALAGI?

B25. What does it mean to you to contribute a cattle beast to a faalavelave? Please explain

O LEA LE UIGA I LAU SUSUGA O LE AVE LEA O SE MANU PALAGI I SE FAALAVELAVE? FAAMOLEMOLE FAAMATALA MAI

B26. Is that the same or different to what it means to you to give a pig? Please explain

PO O LE UIGA EA E TUTUSA POO LE ESEESE I LAU SUSUGA LE AVE O SE MEA-I-TUAOLO I SE FAALAVELAVE? FAAMOLEMOLE FAAMATALA MAI

B27. Does the meaning differ with different faalavelave (eg. a funeral compared to a wedding or conferment of a title)?

PO O LE UIGA EA E ESEESE AI ONA E FUAUFUA LEA I LE ITUAIGA FAALAVELAVE (eg O SE MALIU PEA FAATUSA ATU I SE FAAIPOIPOGA POO SE SAOFAI FOI)?

B28. What do you hope to get in return?

O LEA LOU FAAMOEMOE E MAUA MAI MAI LOU SAO I SE FAALAVELAVE?

B29. Is the size or the number of cattle more important? Why? Is that the same for pigs?

PO O LE LAPOA POO LE NUMERA O MANU PAPALAGI E TAUA ATU? AISEA? PE TUTUSA LEA MA MEA-I-TUAOLO?

C20. Have you ever.....
PE NA E.....

a. Bought cattle from another farmer?

FAATAU MAI SE MANU POO NI MANU PAPALAGI FOI MAI SE ISI
FAIFAATOAGA?

Yes/IOE

No/LEAI

b. Sold cattle to another farmer (alive, for raising)?

FAATAU ATU SE MANU POO NI MANU PAPALAGI FOI I SE ISI FAIFAATOAGA
(FAATAU OLA MO LE TAUSIA)?

Yes/IOE

No/LEAI

c. Exchanged cattle with another farmer?

FESUIAI MANU PAPALAGI MA LE ISI FAIFAATOAGA?

Yes/IOE

No/LEAI

d. Sold cattle to someone else for faalavelave?

FAATAU ATU MANU PAPALAGI I SE ISI TAGATA MO FAALAVELAVE?

Yes/IOE

No/LEAI

e. Sold cattle to give the money to faalavelave?

FAATAU ATU MANU PAPALAGI MO SE TUPE MAUA E AVE I FAALAVELAVE?

Yes/IOE

No/LEAI

f. Bought cattle for faalavelave?

FAATAU MAI MANU PAPALAGI MO FAALAVELAVE?

Yes/IOE

No/LEAI

g. Transported live cattle (how??)

LAU OLA MANU PAPALAGI (FAAFEFEA)? _____

Yes/IOE

No/LEAI

h. Killed a cattle beast or pig for home consumption?

FASIMATE SE MANU PALAGI POO SE MEA-I-TUAOLO MO LE AIGA?

Yes/IOE

No/LEAI

C21. Were any of the above interactions with commercial farmers?
Please explain.

PE SA I AI NI FEUTANAIGA I MEA UA TAU A I LUGA MA FAI FAATOAGA
TETELE? FAAMOLEMOLE FAAMATALA MAI.

C22. Can you please explain to me the process involved in selling
cattle to a butcher?

E MAFAI ONA FAAMATALA MAI FAAMOLEMOLE LE AUALA LEA E FAATAU
ATU AI AU MANU PAPALAGI UA FASI I FALEOLOA?

Questionnaire 1,C

Respondent Number

Incorporation into and impact on farming system

C1. Do you consider yourself a commercial cattle farmer?

PO O E MANATU O LAU SUSUGA O SE FAILAFU MANU PAPALAGI MO LE FAATAUINA ATU AUA TUPE MAUA MAI AI?

Yes/IOE

No/LEAI

C2. Have any of your cropping practices changed since you began to farm cattle, because of cattle? ie. Do you grow more or less or different crops, or grow them in a different way?

PE NA I AI NI SUIGA I ISI ATINAE O LAU FAATOAGA TALU ONA AMATALIA LAU ATINAE LAFU MANU PAPALAGI? ie. PO UA TELE POO UA ITIITI POO UA TOTO FOI ITUAIGA LAAU ESEESE, POO UA TOTO FOI IA LAAU I SE ISI ITUAIGA AUALA?

C3. Do you use your cattle to expose fallen coconuts for collection?

PO O FAAAOGA AU MANU PAPALAGI I LALO O NIU E FAIGOFIE AI ONA ILOA POPO MO LE AOINA?

Yes/IOE

No/LEAI

If YES, has your coconut harvest increased?

AFAI O LEA, PO UA TELE LA POPO UA MAUA MAI?

Yes/IOE

No/LEAI

C4. Are you now putting the same, more or less of your time and labour into farming cattle compared to other sources of income compared to what you used to do?

PO UA TULAGA TUTUSA EA, TELE POO LE ITIITI LOU TAIMI MA GALUEGA FAI UA TUUINA ATU LEA I LAU ATINAE LAFU MANU PAPALAGI PEA FAATUSATUSA ATU LEA I ISI ALA TUPE MAUA MAI MA MEA SA MASANI AI ONA E FAIA?

a. same % time & labour into cattle now
TUTUSA LE PASENE O LE TAIMI MA LE LEIPA I
MANU PAPALAGI I LE TAIMI NEIb. more % time & labour into cattle now
TELE LE PASENE O LE TAIMI MA LE LEIPA I
MANU PAPALAGI I LE TAIMI NEIc. less % time & labour into cattle now
LAITIITI LE PASENE O LE TAIMI MA LE LEIPA
I MANU PAPALAGI I LE TAIMI NEI

If MORE (b.), is that related to

AFAI E TELE, PO UA TALAFEAGAI LEA

a. the greater relative income from cattle?

MA LE TELE O TUPE MAUA MAI I MANU PAPALAGI?

- b. the increasing importance of cattle in faalavelave?
 MA LE FAATELEINA O LE TAUA O MANU PAPALAGI MO FAALAVELAVE?
- c. the security cattle offer?
 MA LE AOGA E MAUA MAI I MANU PAPALAGI?
- d. other? _____
 MA SE ISI MEA?

C5. What farm activities are no longer done because of cattle?
 O A GALUEGA I LAU FAATOAGA UA LE TOE FAIA TALU AI MANU PAPALAGI?

Is that because
 PO O LONA UIGA

a. time and/or labour are no longer available?
 UA LEAI SE TAIMI MA LE/POO LE LEIPA FOI E TOE AVANOA?

b. those things are no longer necessary?
 (ie. because cattle have replaced the need to do them)
 O MEA IA UA LE TATAU ONA TOE I AI?(ie. ONA UA SUITULAGA AI
 MANU PAPALAGI LATOU TE FAIA)

c. other reasons?
 O ISI MAFUAGA? _____

C6. Are you putting less effort into pigs now?
 PO UA LAITIITI LE GALUEGA UA E TUU ATU LEA I MEA-I-TUAOLO I
 LE TAIMI NEI?

Yes/IOE

No/LEAI

C7. Have your cattle taken up land that was once used for crops
 or vegetable gardens, or caused any other changes in land use?
 PO UA FAAAOGA E AU MANU PAPALAGI LE ELEELE LEA SA FAAAOGA I
 AU ATINAE LAU POO TOGA LAU AINA FOI, POO UA FAI LEA MA ITU UA
 TUPU MAI AI SUIGA I LE FAAAOGAINA O LE ELEELE?

Yes/IOE

No/LEAI

Please explain
 FAAMOLEMOLE FAAMATALA MAI _____

C8. Many farmers in Samoa use their cattle as walking banks, only
 killing when a large sum of money is needed. Some people, however,
 recommend killing mature animals and putting the money in a bank.
 Which do you practice (or both) and why?

E TOATELE FAIFAATOAGA I SAMOA UA FAAAOGA LATOU MANU PAPALAGI
 O FALETUPE SAVAVALI, E FASI LAVA PEA MANAOMIA SE TUPE TELE. A O
 NISI FOI E FAUTUAINA LE FASIMATEA O MANU UA MATUTUA MA TEU LE TUPE
 I SE FALETUPE. O FEA O MEA IA E LUA O LOO E FAIA (POO MEA UMA FOI)
 MA AISEA LEA? p.t.o

C9. How have your cattle changed the workloads or the pattern of work (even indirectly) of the following people?

E FAAFEFEA ONA I AI SUIGA I GALUEGA FAI POO GALUEGA FUAFUAINA
FOI A I LATOU UA TAUA I LALO ONA O MANU PAPALAGI?

a. Matai/ MATAI?

b. young and untitled men?/ TAMA TALAVOU MA TAULELEA?

c. women?/ FAFINE?

d. children?/ TAMAITI?

C10. What is your workers' attitude to cattle? Do they like them?

O LEA SE LAGONA A AU TAGATA FAIGALUEGA E UIGA I AU MANU
PAPAPLAGI? PO O LATOU FIAFIA I AU MANU?

C11. What have you (or your caretaker) done to care for your cattle or cattle farm over the last seven (7) days?

O LEA SE GALUEGA SA FAI E LAU SUSUGA(POO LE TAGATA O LOO IA
VAAIA)I LE VAAIA LELEI LEA O AU MANU PAPALAGI POO LAU FAATOAGA
LAFU MANU PAPALAGI FOI I LE FITU (7) ASO UA TEA?

Who did this?

O AI SA FAIA LEA GALUEGA?

C14. In what ways have your cattle farming practices changed since we visited in 1987?

PO O A NI SUIGA I GALUEGA FAI UA OO I AI LAU FAATOAGA MANU PAPALAGI TALU MAI LE TATOU FEILOAIGA I LE 1987,

Why?/AISEA?

C15. Based on your own or other farmers' experience of cattle farming, have you tried new or different ways of

I LUGA O LOU LAVA MALAMALAMA POO LE MALAMALAMA FOI O ISI FAIFAATOAGA LAFU MANU PAPALAGI I LENEI ATINAE, PE NA E TAUMAFAI E FAI NI ALA FOU POO ALA ESEESE I LE....

a. farming your cattle	Yes	No
ATINAEINA O AU MANU PAPALAGI	IOE	LEAI

b. buying or selling cattle	Yes	No
FAATAU MAI MA LE FAATAU ATU O MANU PAPALAGI	IOE	LEAI

c. forming farmer groups?	Yes	No
FAAVAEINA O SOSAIETE FAILAFU MANU?	IOE	LEAI
(all NO go to Q17)		
(A LEAI UMA TAGAI I LE FESILI 17)		

d. If YES to any of the above, What did you do, and why?

AFAI O LEA I SOO SE VAEGA O LOO TAU I LUGA, O LEA SE GALUEGA SA FAI E LAU SUSUGA, MA AISEA LEA?

e. Where did you get the idea from?

O FEA SA MAUA MAI AI LE MALAMALAMA LEA?

f. Did it work?	Yes	No
PE SA MANUIA?	IOE	LEAI

Please explain

FAAMATALA MAI FAAMOLEMOLE

C16. Do you belong to a cattle farmers association or discussion group?

PO O AUAI LAU SUSUGA I SE SOSAIETE A LE AU FAILAFU MANU PAPALAGI
POO SE FAALAPOTOPOTOGA FOI FAATALATALANOA E UIGA I MANU PAPALAGI?

Yes/IOE

No/LEAI

C17. What questions about cattle farming do you have?
What would you like to know more about?

PO O A NI FESILI E UIGA I LE ATINAE LAFU MANU PAPALAGI E FIA
FESILI AI LAU SUSUGA?
PO O A NI MEA E FIA MALAMALAMA ATILI AI LAU SUSUGA?

C18. What are your main cattle production problems, constraints or sources of frustration?

PO O A FAAFITAULI, UUNAIGA POO LE POGAI FOI O POPOLEGA AUTU
I AU MANU PAPALAGI?

How do you deal with them?

E FAAFEFEA ONA E FOIA MEA IA?

C18. What are your main cattle buying and selling problems, constraints or sources of frustration?

PO O A FAAFITAULI, UUNAIGA POO LE POGAI FOI O POPOLEGA AUTU
I LE FAATAU MAI MA LE FAATAU ATU O MANU PAPALAGI?

How do you deal with them?

E FAAFEFEA ONA E FOIA MEA IA?

C19. What are your main social or other problems, constraints or sources of frustration?

PO O A FAAFITAULI, UUNAIGA POO LE POGAI FOI O POPOLEGA AUTU
I LOU VA FEAGAI AI MA ISI POO LE VAEGA FOI O LAFU MANU?

How do you deal with them?

E FAAFEFEA ONA E FOIA MEA IA?

A16. What have you (or your caretaker) done to care for your cattle or cattle farm over the last seven (7) days?

O LEA SE GALUEGA SA FAI E LAU SUSUGA POO SE ISI FOI I LE VAAIGA
O LAU ATINAE MANU PAPALAGI I LE FITU(7) ASO TALU AI?

Who did this? _____

O AI NA FAIA LEA GALUEGA?

A17. Which of the following do you practice?

O A GALUEGA UA TAUA I LALO O LOO E FAAOGAINA?

a) Fencing or tethering your cattle?

PA POO LE NONOAINA O MANU?

Fencing/ PA

Tethering/ NONOA

Why?/AISEA? _____

If FENCING, How many paddocks? _____

AFAI O PA, E FIA PA POVI?

b) Do you have stockyards?

Yes/IOE

No/LEAI

PO O I AI SAU SITOKIA?

Fences/PA

Stockyards/SITOKIA

Who built them?

O AI NA FAIA PA/SITOKIA? _____

Who maintains them?

O AI E VAAIA/SIAKIA PA/
SITOKIA? _____

c) Checking the cattle are O.K?

Yes

No

SIAKI PO O LELEI MANU?

IOE

LEAI

Why?(What might be wrong)

AISEA?(SE FAALETONU E ONO TUPU MAI) _____

How often? _____

E FAAFIA?

Who does this? _____

O AI E FAIA LEA GALUEGA?

d) Supplementary feeding?

Yes

No

ISI MEA-AI?

IOE

LEAI

Why?/AISEA? _____

What?/O LEA? _____

How often? _____

E FAAFIA?

Who does this? _____

O AI E FAIA LEA GALUEGA?

e) Shifting them around ('rotational grazing') on a regular basis? Yes No
SIFIINA O MANU PAPALAGI? IOE LEAI

Why?/AISEA? _____

When? _____ Who does this? _____
O ANAFEA? O AI E FAIA LEA GALUEGA?

f) Ensure they have water? Yes No
MAUTINOA O I AI SE VAI? IOE LEAI

Why?/AISEA? _____

How often? _____ Who does this? _____
E FAAFIA? O AI E FAIA LEA GALUEGA?

g) Management of mating? Yes No
VAAIGA O LE FEUSUAIGA? IOE LEAI

Why?/AISEA? _____

What do you do? _____
O LEA LE GALUEGA E TE FAIA?

h) Weaning of calves? Yes No
FAATEAINA O TAMAIPOVI MA LE SUSU? IOE LEAI

Why?/AISEA? _____

At what age? _____
I LE A LE TAUSAGA?

i) Castration of young bulls? Yes No
FOFOINA O TAMAIPOVI MA LE SUSU? IOE LEAI

Why?/AISEA? _____

j) Planting/sowing better pasture grasses? Yes No
TOTOINA O VAO LELEI? IOE LEAI

Why?/AISEA? _____

k) Weed control? Yes No
TOGAFITIA O LE VAO LEAGA? IOE LEAI

Why?/AISEA? _____

l) Disease prevention? Yes No
PUIPUIA MAI FAAMAI? IOE LEAI

What do you do? _____
O LEA LAU GALUEGA E FAI I LEA ITU?

m) Is there anything else you do? _____
PE I AI SE ISI GALUEGA E FAI E LAU SUSUGA?

Why?/ AISEA? _____

C20. Have you ever.....

PE NA E.....

a. Bought cattle from another farmer?

FAATAU MAI SE MANU POO NI MANU PAPALAGI FOI MAI SE ISI
FAIFAATOAGA?

Yes/IOE

No/LEAI

b. Sold cattle to another farmer (alive, for raising)?

FAATAU ATU SE MANU POO NI MANU PAPALAGI FOI I SE ISI FAIFAATOAGA
(FAATAU OLA MO LE TAUSIA)?

Yes/IOE

No/LEAI

c. Exchanged cattle with another farmer?

FESUIAI MANU PAPALAGI MA LE ISI FAIFAATOAGA?

Yes/IOE

No/LEAI

d. Sold cattle to someone else for faalavelave?

FAATAU ATU MANU PAPALAGI I SE ISI TAGATA MO FAALAVELAVE?

Yes/IOE

No/LEAI

e. Sold cattle to give the money to faalavelave?

FAATAU ATU MANU PAPALAGI MO SE TUPE MAUA E AVE I FAALAVELAVE?

Yes/IOE

No/LEAI

f. Bought cattle for faalavelave?

FAATAU MAI MANU PAPALAGI MO FAALAVELAVE?

Yes/IOE

No/LEAI

g. Transported live cattle (how?)?

LAU OLA MANU PAPALAGI (FAAFEFEA)? _____

Yes/IOE

No/LEAI

h. Killed a cattle beast or pig for home consumption?

FASIMATE SE MANU PALAGI POO SE MEA-I-TUAOLO MO LE AIGA?

Yes/IOE

No/LEAI

C21. Were any of the above interactions with commercial farmers?

Please explain.

PE SA I AI NI FEUTANAIGA I MEA UA TAU A I LUGA MA FAI FAATOAGA
TETELE? FAAMOLEMOLE FAAMATALA MAI.

C22. Can you please explain to me the process involved in selling
cattle to a butcher?

E MAFAI ONA FAAMATALA MAI FAAMOLEMOLE LE AUALA LEA E FAATAU
ATU AI AU MANU PAPALAGI UA FASI I FALEOLOA?

Questionnaire 1,D

Respondant Number

Response to/experience of project

TALI I/MALAMALAMAGA I LE POLOKALAME

You were a participant in a government cattle project begun in 1985.

O LAU SUSUGA O SE TASI O FAIFAATOAGA SA AUAI I LE POLOKALAME LAFUMANU PAPALAGI A LE MALO SA AMATAINA I LE 1985.

D1. Could you please tell us why you participated in the project?

E MAFAI ONA E TAU MAI FAAMOLEMOLE PE AISEA NA E AUAI I LEA POLOKALAME?

D2. What do you think were the objectives of the project?

(tick on the left below)

O A NI FUAFUAGA MAUMAUTUTU I LOU MANATU I LENEI POLOKALAME?

- | | | |
|--------------------------|--|--------------------------|
| <input type="checkbox"/> | a. to increase cattle numbers
FAATELEINA O LE NUMERA O MANU | <input type="checkbox"/> |
| <input type="checkbox"/> | b. to increase farmers' income
FAATELEINA O TUPE MAUA A FAIFAATOAGA | <input type="checkbox"/> |
| <input type="checkbox"/> | c. to increase productivity per animal
(ie. to increase growth and reproduction per animal)
FAATELEINA LE OLAOLA I LE MANU E TASI | <input type="checkbox"/> |
| <input type="checkbox"/> | d. to increase cattle farming management skills
FAATELEINA LE ATAMAI I LE TAUSIGA O LE FAATOAGA LAFUMANU | <input type="checkbox"/> |
| <input type="checkbox"/> | e. technical improvements
eg. improve pasture and breed
FAALELEIA O LE ATAMAI I MATATA ESEESE
E PEI O LE FAALELEIA O LE VAO MA ITUAIGA MANU | <input type="checkbox"/> |
| <input type="checkbox"/> | f. other/NISI MEA | <input type="checkbox"/> |
| <input type="checkbox"/> | h. Don't know/LE ILOA | <input type="checkbox"/> |

D3. What do you think the project objectives should have been?

(tick on the right above)

O A NI FUAFUAGA MAUMAUTUTU I LENEI POLOKALAME E TATAU ONA I AI I LOU LAVA MANATU?

D4. Were you ever asked about

PE SA FESILIGIA LAU SUSUGA E UIGA

a. your needs, problems or objectives

I MEA MANAOMIA, NI FAAFITAULI POO NI AU FUAFUAGA MAUMAUTUTU FOI

Yes/IOE

No/LEAI

b. about how cattle fitted into your farming system?

E UIGA I AUALA E MAFAI AI ONA TUUFAATASI MANU MA ISI ATINAE
O LE FAATOAGA?

Yes/IOE

No/LEAI

Were you ever asked to contribute to the
PE SA FESILIGIA LAU SUSUGA E FAI SOU MANATU I

c. project objectives?

FUAFUAGA MAUMAUTUTU O LENEI POLOKALAME?

Yes/IOE

No/LEAI

d. planning of the project

FUAFUAINA O LENEI POLOKALAME?

Yes/IOE

No/LEAI

e. appraisal of the plans? (before the project)

TALANOAINA O FUAFUAGA? (AE LEI FAIA LE POLOKALAME)

Yes/IOE

No/LEAI

f. monitoring of the project? (during the project)

VAAVAAIGA O LENEI POLOKALAME? (TAIMI O LE POLOKALAME)

Yes/IOE

No/LEAI

g. evaluation of the project? (after the project)

TALANOAINA O LE FAAIUGA O LENEI POLOKALAME? (INA UA MAEA LE
POLOKALAME)

Yes/IOE

No/LEAI

If YES to any of the above, can you describe what happened?

AFAI O LEA, E MAFAI ONA FAAMATALA O LEA LE MEA NA TUPU?

If NO, does this bother you?

AFAI E LEAI, PE SA FAI LEA MA FAALAVELAVE I LOU MANATU?

D5. Were you kept in touch with progress of the project to your
satisfaction?

PE SA FAI MA FAAFESOOTAI MAI LAU SUSUGA I TAUALUMAGA O LENEI
POLOKALAME?

Yes/IOE

No/LEAI

D6. What contact have you had with the Livestock Section or other
project personnel?

O A FESOOTAI NA I AI LAU SUSUGA MA LE VAEGA O LAFUMANU O LE
OFISA O FAATOAGA POO NISI FOI O I LATOU SA FEAGAI MA LENEI
POLOKALAME?

Who?/O AI? _____

How often?/PE FAAFIA? _____

D7.Can you give me an example of any good advice you have got from the Livestock Section, if any, that you have put into practice?

E MAFAI ONA TAU MAI SE FAUTUAGA LELEI NA MAUA E LAU SUSUGA MAI LE VAEGA O LAFU MANU,PE AFAI O IAI,SA E FAAAOGAINA?

D8.Can you give me an example of something you were advised to do by the Livestock Section but you haven't done or it hasn't worked?

E MAFAI ONA TAU MAI SE MEA SA FAUTUAINA AI LAU SUSUGA E LE VAEGA O LAFUMANU E FAI AE LE I FAIA POO LE LE MAFAI FOI ONA FAI?

Why (haven't you done it or it didn't work)?

PE AISEA(UA LE FAIA AI POO LE LE MAFAI FOI ONA FAIA)?

D9.Did you manipulate or change some aspects of the project? (ie. do anything differently to what was expected)....What and why?

PE SA E SUIINA NISI O MEA O LENEI POLOKALAME?
 PEI O LE FAIA LEA O SE MEA E ESE MAI AI NAI LO LE MEA POO MEA FOI E TATAU ONA I AI?....O LEA POO A IA MEA MA PE AISEA FOI NA FAI AI?

D10.Overall, what has been your experience of local project staff? (Livestock Section and extension services etc)

I SE TUUFAATASIGA ATOA, O LEA SOU ILOA E UIGA I LE AUFAIGALUEGA O LENEI POLOKALAME (VAEGA O LAFUMANU etc)

- a. realistic/E MONI
- b. helpful/E FESOASOANI
- c. understanding/E MALAMALAMA
- d. frequent/E FESOOTAI PEA
- e. other/NISI MEA _____

D11.How do you think the Livestock Section staff view you?/ What is their attitude to you as a cattle farmer?

O LEA SE VAAIGA MAI A LE AUFAIGALUEGA A LE VAEGA O LAFUMANU
I LAU SUSUGA I LOU MANATU?

D12. Have you ever had contact with expatriates regarding cattle?
PE NA I AI SE FESOOTAIGA A LAU SUSUGA MA I LATOU MAI FAFO E
UIGA I MANU PAPALAGI?

Yes/IOE

No/LEAI

If Yes, what was your experience of them?
O LEA SOU ILOA IA I LATOU NEI MAI FAFO?

D13. Do you think the people who designed the project knew enough
about Samoan culture and farming systems? Please explain.

PE LAVA SE MALAMALAMA O I LATOU SA FUAFUAINA LENEI POLOKALAME
I LE AGANUU FAASAMOA MA LE FAIGA O A LATOU FAATOAGA I LOU MANATU?
FAAMATALA MAI FAAMOLEMOLE.

D14. What changes does the project expect you to make regarding...?
O A NI SUIGA UA FAAMOEMOE LENEI POLOKALAME E FAI E LAU SUSUGA?

a. Workload

GALUEGA TAUAVE _____

b. Changes to farming system/practices?

SUIGA I LE FAATOAGA ATOA/GALUEGA FAI

c. Learning new skills?

AOAOINA O METOTIA FOU

D15. Were their expectations realistic? Please explain.

PE SA TALAFEAGAI NEI FUAFUAGA? FAAMATALA MAI FAAMOLEMOLE.

D16. Are these the same as the changes you actually found you had
to make? Please give an example?

E TUTUSA NEI SUIGA MA SUIGA NA FAIA E LAU SUSUGA?
E MAFAI ONA TUUINA MAI SE SUIGA FAAMOLEMOLE?

D17. How long do you think it takes to adopt all the changes you need to make to successfully integrate cattle into your farming system?

O LEA SE UMI I LOU MANATU E MAFAI AI ONA FAAAOGAINA SUIGA UMA E TE MANAOMIA MO LE MANUIA O AU LAFUMANU I LE FAATOAGA ATOA?

D18. Where have you got the most useful information about cattle farming? Please rank.

O FEA NA E MAUA MAI AI FAAMATALAGA SILI ONA AOGA E UIGA I FAATOAGA LAFU MANU PAPALAGI? FAATULAGA MAI FAAMOLEMOLE.

Livestock Section extension staff
VAEGA O LAFUMANU MO LE FAALAUTELEINA

The radio
LEITIO

Other cattle farmers (casually)
ISI FAIFAATOAGA LAFU MANU

Your own experience?
LOU POTO MASANI?

Farmer discussion groups
TALANOAGA A FAILAFUMANU

Training courses
AOGA FAATAITAI

D19. Do you get enough information and your questions answered?

PO O LAVA FAAMATALAGA O E MAUA MA LE TALIINA O AU FESILI?

D20. If training course, how would you evaluate the training you have received? Was it relevant? Did you put its recommendations into practice? (If not, why not?)

AFAI O SE AOGA FAATAITAI, E FAAFEFEA ONA E FAATULAGA LE MALAMALAMA NA E MAUA MAI I LEA AOGA? PE SA TALAFEAGAI? PE SA E FAAAOGAINA I AU GALUEGA FAI MEA LELEI NA MAUA MAI? (AFAI E LEAI, AISEA LEA?)

D21. If you were planning this project, what would you have done differently?

AFAI O LAU SUSUGA LEA SA FUAFUAINA LENEI POLOKALAME, O A NI MEA E TE FAIA E ESE MAI AI MA FUAFUAGA O LE ATINAE PEI ONA I AI?

D22. Have you participated in any more recent projects? (Austln?*)
PE SA AUAI LAU SUSUGA I NISI POLOKALAME TALU AI NEI?

Yes/IOE

No/LEAI

If Yes, have you noticed any improvements? What?

AFAI O LEA, PE NA VAAIA E LAU SUSUGA NI TULAGA LELEI? O A IA TULAGA
LELEI?

D23. Some people say that productivity (ie. growth and reproduction)
per cattle beast is low and future projects should tackle this.

What do you think could be done to increase productivity per
cattle beast?

UA FAAPEA MAI NISI O LE OLAOLA (ie. TUPU MA LE FAAOLAOLAINA) I
LE MANU E TASI E MAUALALO MA O POLOKALAME I LE LUMANAI E TATAU
ONA FOAI AI LEA ITU.

O LEA SE MEA I LOU MANATU E ONO FAI E FAATELE AI LE TUPU POO
LE OLAOLA FOI I LE MANU PALAGI E TASI?

D24. In future projects do you think the emphasis should be on
increasing cattle numbers or on increasing productivity per cattle
beast?

O LEA SE MANATU I LAU SUSUGA MO POLOKALAME I LE LUMANAI PE
TATAU ONA FAATELEINA LE NUMERA O MANU PAPALAGI POO LE FAATELEINA
LEA O LE OLAOLA I LE MANU E TASI?

a. increasing numbers
FAATELEINA LE NUMERA O MANU

b. increasing productivity per animal
FAATELEINA LE OLAOLA I LE MANU E TASI

Why?/AISEA?

D25. If you were planning a new cattle development project and could
do anything, what would you do?

AFAI O LAU SUSUGA LEA E FUAFUAINA SE POLOKALAME ATINAE FOU MA FAIA
SOO SE MEA, O LEA SE MEA E TE FAIA?

A16. What have you (or your caretaker) done to care for your cattle or cattle farm over the last seven (7) days?

O LEA SE GALUEGA SA FAI E LAU SUSUGA POO SE ISI FOI I LE VAAIGA O LAU ATINAE MANU PAPALAGI I LE FITU(7) ASO TALU AI?

Who did this? _____

O AI NA FAIA LEA GALUEGA?

A17. Which of the following do you practice?

O A GALUEGA UA TAUA I LALO O LOO E FAAOGAINA?

a) Fencing or tethering your cattle?

PA POO LE NONOAINA O MANU?

Fencing/ PA

Tethering/ NONOA

Why?/AISEA? _____

If FENCING, How many paddocks? _____

AFAI O PA, E FIA PA POVI?

b) Do you have stockyards?

Yes/IOE

No/LEAI

PO O I AI SAU SITOKIA?

Fences/PA

Stockyards/SITOKIA

Who built them?

O AI NA FAIA PA/SITOKIA? _____

Who maintains them?

O AI E VAAIA/SIKIA PA/SITOKIA? _____

c) Checking the cattle are O.K?

Yes

No

SIKI PO O LELEI MANU?

IOE

LEAI

Why?(What might be wrong)

AISEA?(SE FAALETONU E ONO TUPU MAI) _____

How often? _____

E FAAFIA?

Who does this? _____

O AI E FAIA LEA GALUEGA?

d) Supplementary feeding?

Yes

No

ISI MEA-AI?

IOE

LEAI

Why?/AISEA? _____

What?/O LEA? _____

How often? _____

E FAAFIA?

Who does this? _____

O AI E FAIA LEA GALUEGA?

e) Shifting them around ('rotational grazing') on a regular basis? Yes No
SIFIINA O MANU PAPALAGI? IOE LEAI

Why?/AISEA? _____

When? _____ Who does this? _____
O ANAFEA? O AI E FAIA LEA GALUEGA?

f) Ensure they have water? Yes No
MAUTINOA O I AI SE VAI? IOE LEAI

Why?/AISEA? _____

How often? _____ Who does this? _____
E FAAFIA? O AI E FAIA LEA GALUEGA?

g) Management of mating? Yes No
VAAIGA O LE FEUSUAIGA? IOE LEAI

Why?/AISEA? _____

What do you do? _____
O LEA LE GALUEGA E TE FAIA?

h) Weaning of calves? Yes No
FAATEAINA O TAMAIPOVI MA LE SUSU? IOE LEAI

Why?/AISEA? _____

At what age? _____
I LE A LE TAUSAGA?

i) Castration of young bulls? Yes No
FOFOINA O TAMAIPOVI MA LE SUSU? IOE LEAI

Why?/AISEA? _____

j) Planting/sowing better pasture grasses? Yes No
TOTOINA O VAO LELEI? IOE LEAI

Why?/AISEA? _____

k) Weed control? Yes No
TOGAFITIA O LE VAO LEAGA? IOE LEAI

Why?/AISEA? _____

l) Disease prevention? Yes No
PUIPUIA MAI FAAMAI? IOE LEAI

What do you do? _____
O LEA LAU GALUEGA E FAI I LEA ITU?

m) Is there anything else you do? _____
PE I AI SE ISI GALUEGA E FAI E LAU SUSUGA?

Why?/ AISEA? _____

Village Household Survey : Satoalepai
SEVEI O AIGA I LE NUU: SATOALEPAI

Number

1. Does anyone in this household have cattle?
 PE I AI SE ISI I LE AIGA NEI E I AI SANA POVI POO NI POVI FOI?

YES/IOE

NO/LEAI

2. Who do they belong to?
 O AI O I LATOU UA TAUA I LALO E ONA POVI?

a. the head of the household?
 O LE ULU/TAITAI O LE AIGA?

b. someone else in the household? Who?/O AI?(FAIA FAALEAIGA)

c. the whole household?
 LE AIGA ATOA?

Is the owner a matai?
 PO O SE MATAI LE ONA POVI? Yes/IOE No/LEAI

3. How many people live in this household?
 E FIA TAGATA O LOO NONOFO I TOTONU O LE AIGA NEI? _____

4. Who looks after the cattle?
 O AI E VAAIA POVI? _____

5. How many of the following do you have?
 E FIA AU POVI UA TAUA I LALO O I AI?

a. bulls
 PULU _____

b. old cows
 POVI AUMATUA UA LE TOE FANAFANAU _____

c. breeding age cows
 POVI AUMATUA FANAFANAU _____

d. heifers
 POVI TAANOVA _____

e. young animals (up to one year old)
 TAMAIPOVI E OO I LE TAUSAGA LE MATUA _____

f. steers
 SITIA (POVI POA UA UMA ONA FOFO) _____

Total
 AOFAI ATOA _____

5. When did you start cattle farming?
 O ANAFEA SA AMATA AI LAU ATINAE POVI? _____

6. Where did you get your cattle from?
 O FEA SA AUMAI AI AU POVI?

7. What benefits have cattle brought to the village?
O A NI MEA LELEI NA MAUA MAI I POVI MO LE NUU?

8. What is their importance or place in village life?
O LEA SE ITU TAUA POO SE TULAGA FOI O POVI I LE SOIFUAGA O LE NUU?

9. Have you noticed any changes in the village or farming activities due to cattle in recent years?
PO UA E ILOA NI SUIGA I TOTONU O LE NUU POO GALUEGA FOI I FAATOAGA TALU AI POVI INI TAUSAGA LATA MAI NEI?

10. Have cattle changed your life in any way? Please explain.
PE NA I AI SE SUIGA I LOU OLAGA I SOO SE ITU TALU AI POVI? FAAMOLEMOLE FAAMATALA MAI.

11. Why do you think some people have cattle and others don't?
AISEA I LOU MANATU O NISI TAGATA UA I AI POVI AO ISI E LEAI?

12. What has been the impact of cattle on your relations with other people in the village?
O LEA SE AFAINA O POVI I LOU VA FEALOAI MA ISI TAGATA I TOTONU O LE NUU?

13. What is their attitude to your cattle?
O LEA LE LATOU VAAI MAI I AU POVI?

14. Have you ever experienced anyone
PE NA I AI SE ISI I SE TAIMI NA

a. harming your cattle	Yes	No
FAAMANUALIA AI AU POVI?	IOE	LEAI

(14.)

- | | | |
|--|------------|------------|
| b. breaking your fences?
FAALEAGAINA AU PA? | Yes
IOE | No
LEAI |
| c. stealing your cattle?
GAOIA AU POVI? | Yes
IOE | No
LEAI |

If Yes, why do you think this happens?
AFAI O LEA, AISEA I LOU MANATU UA TUPU AI?

15. Do you think cattle have caused tension in the village?
PO O LOU MANATU UA AVEA POVI MA FEESESEEAIGA I TOTONU O LE
NUU?

Yes IOE	Some I NISI	No LEAI
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If YES, in what way? Please explain.
AFAI O LEA, I LEA LE ITU? FAAMOLEMOLE FAAMATALA MAI.

16. Have cattle caused a gap to widen between rich and poor families?

PO UA AVEA POVI MA MAFUAGA UA MAUA AI SE VA TELE I LE VA O
AIGA MAUMEA MA AIGA MATITIVA?

Yes/IOE	No/LEAI
---------	---------

17. Who has benefited the most from cattle and why?
O AI TAGATA E TELE LE SELESELE E MAUA MAI POVI MA AISEA LEA?

18. Who has benefited least from cattle and why?

O AI TAGATA E LAITIITI LE SELESELE E MAUA MAI POVI MA AISEA
LEA?

19. Do you think cattle are becoming more important in faalavelave?
PO O LOU MANATU UA AVEA POVI MA MANU FAATAUAINA I FAALAVELAVE?

Yes/IOE	NO/LEAI
---------	---------

If yes, why do you think this is?
AFAI O LEA, AISEA I LOU MANATU UA FAAPEA AI?

20. What does it mean to you to contribute a cattle beast to a faalavelave? Please explain

O LEA LE UIGA IA TE OE O LE AVE LEA O SE POVI I SE FAALAVELAVE?
FAAMOLEMOLE FAAMATALA MAI

21. Are faalavelave a constraint on or a motivation for your cattle farming, or do they have a neutral effect?

PO UA AVEA FAALAVELAVE MA PA PUIPUIA POO LE FAAOSOFIA FOI O LE AGAGA FIA FAI ATINAE POVI, POO LE LE AFAINA LEA?

a. a constraint
O SE PA PUIPUIA

b. a motivation
FAAOSOFIA O LE AGAGA

c. neutral effect
E LE AFAINA

22. Do you sometimes feel pressured by others to kill your cattle for faalavelave?

PE I AI SE TAIMI E FAATAUANAU AI OE E ISI E FASIMATE SAU POVI POO NI POVI FOI MO SE FAALAVELAVE?

Yes/IOE

No/LEAI

Please explain

FAAMOLEMOLE FAAMATALA MAI _____

23. How do you manage all the expectations placed on you?

(Do you sometimes avoid eg. when asked to give cattle to faalavelave. Can you give me an example?)

E FAAFEFEA ONA E TAUAVEINA UMA FUAUFUAGA AUTU UA TUUINA ATU IA TE OE?(PE I AI SE TAIMI E LE FAIA AI eg. PEA LE AVEA SE POVI I SE FAALAVELAVE. E MAFAI ONA TAU MAI SE MEA NA TUPU?)

24. Do you think a younger person with cattle is more likely to get a matai title?

PO O LOU MANATU O SE TAGATA TALAVOU E I AI ANA POVI ATONU E MAUA SONA SUAFA MATAI?

Yes/IOE

No/LEAI

25. Can you share with me or tell me a story from your experience of how cattle have been incorporated into or influenced Samoan culture?

PO I AI SE ISI MEA E TE FIA TUFATUFA MAI AI POO SAU TALA FOI I LOU ILOA I POVI MA SE AAFIAGA I LE AGANUU FAASAMOA?

(25.)

26. How does Samoan culture affect the way you farm your cattle?
FAAFEFEA I LE AGANUU FAASAMOA ONA AAFIA AI LE ITU TAU LOU
ATINAEINA O AU POVI?

27. How would you describe a successful cattle farmer?
E FAAFEFEA ONA E FAAMATALAINA LE FAILAFU POVI MANUIA?

28. Would you describe yourself as a successful cattle farmer?
UA E MANATU UA AVEA OE O SE FAILAFU POVI MANUIA?

Yes	No	Don't know	Other
IOE	LEAI	LE SILAFIA	NISI MEA

29. How do you think you compare with other cattle farmers in
the village? Please explain.
O LEA SOU MANATU PEA FAATUSA OE MA ISI FAIFAATOAGA LAFU POVI?
FAAMOLEMOLE FAAMATALA MAI.

30. Do the cattle farmers in your village, cooperate in any way?
Please explain.
PE I AI SE GALUE FELAGOLAGOMAI I SOO SE AUALA A LE AU FAILAFU
POVI I LOU NUU? FAAMOLEMOLE FAAMATALA MAI.

31. To what extent do you (plural) share information or experience
about cattle?
O LEA LE TELE TOU TE FETUFAAI AI I FAAMATALAGA POO LE MALAMALAMA
FOI E UIGA I POVI?

Village Household Survey : Satoalepai
SEVEI O AIGA I LE NUU: SATOALEPAI

Number

1. Does anyone in this household have cattle?
 PE I AI SE ISI I LE AIGA NEI E I AI SANA POVI POO NI POVI FOI?

YES/IOE

NO/LEAI

2. If No, have you ever had cattle before?
 AFAI E LEAI, PE NA I AI MUAMUA SAU POVI POO NI POVI FOI?

YES/IOE

NO/LEAI

If Yes, How many did you have?

AFAI O LEA, E FIA AU POVI SA I AI? _____

What happened to them and why?

O LEA LA LE MEA SA TUPU I IA POVI MA AISEA FOI?

3. How many people live in this household?
 E FIA TAGATA O LOO NONOFO I TOTONU O LE AIGA NEI? _____

4. Would you like to have cattle?
 PE I AI SOU MANAO IA I AI SAU POVI POO NI POVI FOI?

YES/IOE

NO/LEAI

5. Why don't you have any cattle?
 AISEA LE MEA UA LEAI AI NI AU POVI?

6. What benefits have cattle brought to the village?
 O A NI MEA LELEI NA MAUA MAI I POVI MO LE NUU?

7. What is their importance or place in village life?
 O LEA SE ITU TAUA POO SE TULAGA FOI O POVI I LE SOIFUAGA O LE
 NUU?

8. Have you noticed any changes in the village or farming activities
 due to cattle in recent years?

PO UA E ILOA NI SUIGA I TOTONU O LE NUU POO GALUEGA FOI I
 FAATOAGA TALU AI POVI INI TAUSAGA LATA MAI NEI?

9. Why do you think some people have cattle and others don't?
AISEA I LOU MANATU O NISI TAGATA UA I AI POVI AO ISI E LEAI?

10. Do some people have better access to cattle than others? Please explain.

PO O I AI NI TAGATA E FAIGOFIE ONA MAUA MAI A LATOU POVI MAI SOO SE MEA NAI LO ISI?

11. What has been the impact of cattle on your relations with other people in the village?

O LEA SE AFAINA O POVI I LOU VA FEALOAI MA ISI TAGATA I TOTONU O LE NUU?

12. Do you think cattle have caused tension in the village?

PO O LOU MANATU UA AVEA POVI MA FEESESEEAIGA I TOTONU O LE NUU?

Yes	Some	No
IOE	I NISI	LEAI

If YES, in what way? Please explain.

AFAI O LEA, I LEA LE ITU? FAAMOLEMOLE FAAMATALA MAI.

13. Have cattle caused a gap to widen between rich and poor families?

PO UA AVEA POVI MA MAFUAGA UA MAUA AI SE VA TELE I LE VA O AIGA MAUMEA MA AIGA MATITIVA?

Yes/IOE	No/LEAI
---------	---------

14. Who has benefited the most from cattle and why?

O AI TAGATA E TELE LE SELESELE E MAUA MAI POVI MA AISEA LEA?

15. Who has benefited least from cattle and why?

O AI TAGATA E LAITIITI LE SELESELE E MAUA MAI POVI MA AISEA LEA?

16. Do you think cattle are becoming more important in faalavelave?
 PO O LOU MANATU UA AVEA POVI MA MANU FAATAUAINA I FAALAVELAVE?

Yes/IOE

NO/LEAI

If yes, why do you think this is?
 AFAI O LEA, AISEA I LOU MANATU UA FAAPEA AI?

17. What do you think other people try to achieve when they contribute a cattle beast to a faalavelave?
 O LEA SOU MANATU O LEA SE MEA E TAUMAFAI I LATOU IA E MAUA MAI PE A AVE SE POVI I SE FAALAVELAVE?

18. Do you think farmers with cattle are generous, about right or reluctant to give when contributing cattle to faalavelave?
 PO O LOU MANATU O FAIFAATOAGA IA E IAI A LATOU POVI E NAUNAU LAVA, LEAI SE MEA O I AI POO LE LE MANAO FOI E AVE SE POVI POO NI POVI I FAALAVELAVE?

- a. generous
 NAUNAU LAVA
- b. about right
 LEAI SE MEA O I AI
- c. reluctant
 LE MANAO

19. Do you think a younger person with cattle is more likely to get a matai title?
 PO O LOU MANATU O SE TAGATA TALAVOU E I AI ANA POVI ATONU E MAUA SONA SUAFA MATAI?

Yes/IOE

No/LEAI

20. Can you share with me or tell me a story from your experience of how cattle have been incorporated into or influenced Samoan culture?
 PO I AI SE ISI MEA E TE FIA TUFATUFA MAI AI POO SAU TALA FOI I LOU ILOA I POVI MA SE AAFIAGA I LE AGANUU FAASAMOA?

QUESTIONNAIRE: Respondent Number
Cattle Project Personnel, Advisors, Consultants and Staff

If this questionnaire is unable to be completed or collected in Western Samoa, please send completed questionnaire to:

Susan Maiava
Institute of Development Studies
Massey University
Private Bag
Palmerston North
New Zealand

Thank you very much.

INTRODUCTION

I am a PhD student at Massey University and would be very grateful if I could ask you some questions about your experience with cattle farmers and cattle projects in Western Samoa.

I am conducting a survey of approximately 55 smallholder cattle farmers as my primary source of information but it is important the I balance their views, set them in a wider context, particularly as project participants, and seek alternative perspectives.

I hope that my study will contribute to a greater understanding of cattle farming in Samoa. My findings will be made available to everyone who has contributed to them.

Be assured that ALL REPLIES ARE ABSOLUTELY CONFIDENTIAL and no person (or organisation if requested) will be individually identified.

Please feel free to add any comments or opinions or correct me if my questions show a lack of understanding.

Any stories or anecdotes are also welcome.

You need not feel restricted to your specialist area. Observations in other areas are welcome.

All questions refer to SMALLHOLDER cattle farmers in Western Samoa (as opposed to commercial cattle farmers) even though some are not so small, wherever you draw the line. I am including those who are Apia based and/or have other occupations as well as village farmers.

QUESTIONS

1. What is the name of your project?

2. What is your role?

3. Do you have any background documents that describe the project I could borrow?
4. What are the objectives of your project?
5. How were they determined?
6. Can you please briefly describe the project you are involved with as it relates to smallholder cattle farmers? Is it integrated with other projects?
7. How were participants selected?.
8. To what extent have farmers participated in setting project objectives, project design, appraisal, monitoring and evaluation?
9. Where have you sourced your information on smallholder cattle farmers from? What information, if any, did you seek? What research was conducted as part of the project planning process?

10. What behaviours/practices are farmers expected to adopt and why?

11. What have farmers responses been, both expected and unexpected, to your project and or project components?

12. What has limited farmers' ability to respond?

13. What has motivated farmers to adopt cattle?
What are the benefits of cattle to smallholder farmers?
What does the project offer farmers?

14. What has motivated them to adopt or not adopt specific recommended practices in your specialist area?

15. What is the impact of cattle on farmers' farming system, workload, crops? ie. what other changes are required or assumed when a farmer incorporates cattle into their farming system?

16. How would you describe a successful smallholder cattle farmer?

17. How successful do you think the average smallholder cattle farmer is?

18. What are farmers' main objectives regarding cattle?
What purposes or roles do farmers use their cattle for?

19. What farming practices re cattle do farmers actually practice, both good and bad, compared to recommended practices above? How do you account for any differences between recommended and actual?

20. What problems, constraints or sources of frustration do farmers face?

21. What problems and constraints does the industry face?/What are the main obstacles to the development of the smallholder cattle sector?

22.To what extent are traditional exchanges (faalavelave) a constraint? (compared to other constraints?)

23.What successes have you observed?

24.What is farmers' level of technical knowledge in your specialist area? What technically incorrect ideas do farmers have?

25.In what ways have you observed farmers adapt cattle to their farming system and technical and other circumstances on their own initiative? Was it technically correct?

26.What do you think farmers need to know (eg. training etc.) What changes still need to occur?

27.What question have I failed to ask and what is its' answer? (or any further comments you would like to make)

THANK YOU VERY MUCH

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