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IMPLEMENTING A QUALITY PROGRAMME

ON A SEASONAL SUPPLY DAIRY FARM

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ABSTRACT

As the dairy industry becomes more customer-focused dairy farmers are being encouraged to adopt a formal approach to quality management. At the same time milk processing companies are examining the procedures used to ensure milk collected from farms is of the "finest" standard as part of their strategy to move from commodity sales to added-value products. In addition, milk quality and milk payment parameters have changed over the last decade to reflect the more valuable components of milk (protein versus fat), the pattern of production through the year (shoulder milk premiums) and the absence of quality faults (grades). Animal welfare and resource management are also important quality 'factors' in the dairy industry. As New Zealand seeks to enhance its "clean green" image, farmers are coming under the scrutiny of quality conscious customers seeking to ensure that the highest standards of animal husbandry, land management and food production are practiced.

Parameters for milk quality at the vat (farm-gate) are well documented and strict testing procedures are in place at milk processing sites. However, procedures and practices necessary to consistently produce finest quality milk are not so obvious. To address this shortcoming a study was conducted to design and implement a Total Quality Management (TQM) programme at Massey University's No.4 dairy farm, a 450 cow seasonal supply dairy farm. A monthly management calendar was developed to aid in consistently achieving key farm management activities. A supplementary monthly diary sheet was also designed to allow comprehensive recording of farm and herd data that are pertinent to the assurance of product quality. Computer software was utilised to model, record and monitor farm physical and financial performance.

The key attribute of the TQM programme was to ensure that staff were willing and able to implement the management systems put in place for assuring quality milk production. This required staff training and development, and recognition for tasks completed well.

The implementation of a TQM programme can lead to measurable rewards in improved physical and financial performance. The programme also ensures compliance with the legislation governing animal welfare, resource management, employment and occupational safety and health. Job satisfaction for staff and assured milk quality are seen as a key benefits.

Keywords: Total Quality Management (TQM); milk quality; dairy farm management; Quality Assurance (QA).

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This is not a definitive study but merely the basis for an ongoing refinement of the TQM philosophy for the farm’s objective of “*Excellence in the Production of Seasonal Milk*”

Table of contents

Abstract	i
Acknowledgements	ii
Table of Contents	iii
List of Tables	iv
List of Figures	v
List of Abbreviations	vi
CHAPTER ONE	1
1.0 Introduction	1
1.1 Problem Statement	2
1.2 Project Proposal	2
1.3 Objectives	2
CHAPTER TWO	3
2.0 The New Zealand Dairy Industry	3
2.1 Industry Structure	3
2.2 Processing Industry	7
2.3 Milk Price	8
2.4 Milk Quality	10
2.5 Quality Systems	12
2.6 Total Quality Management	14
2.7 Other Components Of Quality In The Dairy System	17
<i>2.7.1 The 1991 Resource Management Act</i>	17
<i>2.7.2 Animal Welfare</i>	19
<i>2.7.3 Labour and the Employment Contracts Act</i>	20
<i>2.7.4 Occupational Safety And Health</i>	21
2.8 Conclusion	21
CHAPTER THREE	23
3.0 Introduction	23
3.1 Description Of No. 4 Dairy Farm	23

CHAPTER FOUR	29
4.0 The On Farm Application Of TQM	29
4.1 The Introduction Of TQM On Farm.	30
4.2 Climate	34
4.3 Labour	34
4.4 Soils	36
4.5 Pasture	37
4.6 Animals	40
4.7 Plant And Milk Quality	42
4.8 Financial	43
4.9 Concluding Comments	46
5. REFERENCES	47
APPENDICES	50
Appendix 1 Farm Management Calendar	
Appendix 2 Dairy Farms Diary Sheet	
Appendix 3 Weekly Report	
Appendix 4 Conditions of employment for Farm Staff on salary	
Appendix 5 Job Description	
Appendix 6 Weekly shed cleaning routine	
Appendix 7 Machinery maintenance sheet	
LIST OF TABLES	
Table 2.1 NZ milk production 1974/75 to 1995/96, number of herds and cow numbers (LIC, 1996).	5
Table 3.1 Summary of the key parameters for No.4 dairy farm (Farm Services, 1996).	24
Table 3.2 Livestock classes and numbers wintered (1 July) and milked (1 Dec., 1 Feb.) by No.4 during the 1992/93 to 1995/96 seasons (Farm Services, 1996).	24
Table 3.3 Annual milk production No.4 for the 1992/93 to 1995/96 seasons. Milk production includes supply to factory and calf milk (Farm Services, 1996).	25

Table 3.4	Pasture Production (kgDM/ha/day) for the No.4 farm from 1992/93 to 1995/96. The 21 year average daily pasture production by month and annual total DM production is also shown. (Farm Services, 1996)	26
Table 3.5	Supplementary feed (tonnes dry matter) conserved, purchased and utilised at No.4 for the 1992/93 to 1995/96 seasons. (Farm Services, 1996).	27
Table 3.6	Conversion of available DM to Milksolids on No.4 for the 1992/93 to 1995/96 seasons. (Farm Services, 1996).	28
Table 3.7	Fertiliser application (tonnes/ha) and units N,P,K and S supplied per hectare at No.4 for the 1992/93 to 1995/96 seasons. g(Farm Services, 1996).	28
Table 4.1	Example of a No.4 feed budget (note: 6 months only shown).	39
Table 4.2	No.4 farm working account forecast with MAF comparison for the year ending 30 June 1997.	45

LIST OF FIGURES

Figure 2.1	Structure of the NZ Dairy Industry (NZDB, 1994) modified to show 1996 statistics	4
Figure 2.2	Milk production, cows and herds 1974/75 to 1995/96 (LIC, 1996).	5
Figure 2.3	Dairy production (note kg milkfat (MF) Real 1989 \$ value/kgMF (NZDB as cited by Crocombe, et al. 1991).	6
Figure 2.4	Milk harvesting guide, tests and parameters for milk quality (TMP, 1995)	11
Figure 2.5	Total Quality Management - Deer QA (source NZGIB, 1996).	15
Figure 3.1	Pasture growth rate (kgDM / ha /day) for the 1992/93 to 1995/96 seasons at No.4 (Farm Services, 1996).	26
Figure 4.1	Components of the dairy farm system (MacDonald, 1996).	31
Figure 4.2	Generic farm management calendar page describing some of the elements contained in the working version (see Appendix 1).	32
Figure 4.3	Pasture Growth vs Feed Demand (kgDM/ha) average year (No.4 19 yr. average PGR, stocking rate of 2.6 cows per hectare).	38

LIST OF ABBREVIATIONS

AGMARDT	Agricultural and Marketing Research and Development Trust
AI	Artificial insemination
APA	Animal Protection Act
AWA	Animal Welfare Act
BW	Breeding Worth
CAG	Commercial Activities Group
CCCM	Computer Concepts Cash Manager
CIDR	Controlled Internal Drug Release
CS	Condition score
DM	Dry matter
ECA	Employment Contracts Act
EEC	European Economic Community
EFS	Effective farm surplus
GIB	Game Industry Board
HASE	Health and Safety in Employment
HT	Herd test
ISO	International Standards Organisation
LIC	Livestock Improvement Corporation
LW	Liveweight
MAF	Ministry of Agriculture and Fisheries
MF	Milk fat
MQA	Milk quality assurance
MS	Milk solids
NZ	New Zealand
NZDB	NZ Dairy Board
NZOQ	NZ Organisation for Quality
OSH	Occupational Safety and Health
PGR	Pasture growth rate
PSC	Planned start of calving
QA	Quality assurance

QM	Quality Management
RMA	Resource Management Act
SAMM	Seasonal approach to managing mastitis
SCC	Somatic cell count
SGS	Societe Generale de Surveillance
SNF	Solids non fat
SR	Stocking rate
TELARC	Testing Laboratory Registration Council
TMP	Tui Milk Products
TQM	Total quality management