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**THE EFFECTIVENESS AND RESULTS OF THE
NEW ZEALAND OFFICIAL DEVELOPMENT
ASSISTANCE EDUCATION AND TRAINING
PROGRAMME TO THE PHILIPPINES**

A thesis presented in partial fulfillment of the requirements for the
degree of Master of Philosophy in Development Studies at
Massey University

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ABSTRACT

The role of education in the development of any given society is, beyond doubt, central, and crucial. When developing countries began their drive for social and economic development more than three decades ago, education was perceived as a means not only of raising political and social consciousness, but also of increasing the number of skilled workers and raising the level of trained humanpower. There is nothing new in a developing country seeking help from the developed countries who fund scholarships, trainings and programmes. The effects of these scholarships, trainings and programmes on the developing countries is much an open issue for study.

This thesis examines the outcomes and effectiveness of an educational aid programme in the Philippines. Its central purpose is to determine and evaluate the New Zealand Official Development Assistance (NZODA) Education and Training Programme for the Philippines. This entails an examination of the social and private benefits, as well as the costs accrued to the recipients and donor country were also looked at. The NZODA educational aid for the Philippines was further analysed in relation to the general aid objectives of gender bias, rural and urban development, and equal development of private and government institutions.

The study found that there are many social, economic and technological benefits that are derived from the programme and that accrue to the recipients and the donor. Further, the programme has brought about many substantial changes both in the social and economic development of the Philippines. The programme has not only increased the number of highly skilled employees but has increased as well the social and private rates of returns. Moreover, it was found that expansion of educational aid in the Philippines would be profitable for both the Philippines and New Zealand. In general, the programme is effective, but, because the results of the programme are faced by many constraints, there are a big number of things that need to be improved.

DEDICATION

To my Filipino brothers and sisters struggling through the margins of life and suffering from the bondage of poverty, illiteracy and domination -

ninia

PREFACE

It was in Summer of 1994 when my attention was called by the Director of the Institute for Development Education (IDE), Dr. Tan, to submit an application for an international scholarship. I was surprised to be nominated by the University of Santo Tomas, the university where I was then teaching at, considering the fact that I was one of the youngest amongst the faculty members, and the youngest amongst the (IDE) researchers. However, what concerned me more was the scholarship which I had not heard of before. I personally submitted the nomination to the Special Committee on Scholarships (SCS), and luckily, I was interviewed. A few minutes after the interview, I was given a letter addressed to the Department of Health for a physical examination. Quite happy, I told some of my colleagues, only to find out that two of my colleagues had the same application, filed two years earlier but have yet to be acted upon. I was told that I would not be able to go, just like them. After passing the IELTS in November of the same year, I was informed that by February I would be going to New Zealand. Then, on the 11th of February of 1995, a day after the defense of my Masteral Thesis in Development Education at UST, I flew to New Zealand for further study. Although I was quite hesitant in going, but considering that the study would be under a scholarship and someone was encouraging me to really go, I finally did.

I, together with the other scholars went aboard, without knowing if there was someone to meet us in the airport. We didn't even know what would it be like to study in New Zealand. We were at a lost in terms of information about the University we were going to, or as to what would happen to us if no one was there to see us. What food would we eat? What clothes should we wear? and many other questions. But these concerns were nothing, compared to other information about Filipino scholar prior me which appalled me. There were many other Filipino scholars who were here at Massey studying. Further, I learned from them that there were many other scholars who had graduated already; many of which had gone home while some did not. I was surprised to find out that there were quite a number of students who had finished since 1989, and even before while the scholarship was still under the Colombo Plan. If there were already so many recipients or graduates of the scholarship, then why was it that many of us Filipinos still are not aware about such scholarship programmes? Why is it that since 1989, I was only the third grantee who came from a private institution? Why was it that majority of the grantees came from the government offices and government owned corporations? Why were there many grantees coming from the central government offices? Why was it that there were more males than females? If there had been so many graduates since 1989, or since from the Colombo Plan, where are they now, and what have they

done for the development of the Philippines? New Zealand is just one country, how about the grantees in other Developed Countries? What has the education in New Zealand contributed to them?

It was these questions that motivated me to study this topic. Personally, at the time of the completion of this thesis, I had some thoughts about the uncertainty of the future of my career. Despite the completion of my study, I am not sure of what lies ahead. Will it just be a mere stock of knowledge or will it have immediate relevance to my work? Although it is quite relevant to my research work in the University, the degree of significance remains to be seen. How many graduate grantees have been in the same predicament?

If only all the past scholars to different countries were given the chance to prove that they had learned something, and that something would be used to speed up Philippine development, perhaps Philippines would no longer be just a developing country today. Hopefully, then, this thesis will provide readers, specially the donor countries and the Philippines, and other developing countries on the results and effectiveness of educational aid with an end in view of improving and maximising the development efforts for further benefits toward real aid and development. It is from this that development efforts can be improved and maximised for further benefits towards real aid and development.

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LIST AND ABBREVIATIONS

ASEAN	-	Association of South East Asian Nations
CID	-	Committee on International Development
CSC	-	Civil Service Commission
DAC	-	Development Assistance Committee
DAC-ODA	-	Development Assistance Committee-Overseas Development Administration
DECS	-	Department of Education, Culture and Sports
DFA	-	Department of Foreign Affairs
EU	-	European Union
FTI	-	Food Terminal Incorporated
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
GTZ	-	German Agency for Technical Cooperation
HCA	-	Human Capital Approach
HCM	-	Human Capital Model
HDI	-	Human Development Index
HRD	-	Human Resource Development
IAC	-	International Agriculture Center
IAEA	-	International Atomic Energy Agency
IBRD	-	International Bank for Reconstruction and Development
ICA	-	International Cooperation Administration
IDA	-	International Development Agency
IDA/IBRD	-	International Development Agency/International Bank for Reconstruction and Development
IELTS	-	International English Language Testing System
ILO	-	International Labor Organisation
IMF	-	International Monetary Fund
ISO	-	International Students' Office
MA	-	Master of Arts
MERT	-	Ministry of External Relations and Trade
MFAT	-	Ministry of Foreign Affairs and Trade
Mphil	-	Master of Philosophy
MsC	-	Master of Science
MTPDP	-	Medium-Term Philippine Development Plan
NCSO	-	National Census and Statistics Office
NEDA	-	National Economic Development Authority
NGO	-	Non-Government Organisation
NSO	-	National Statistics Office
NZ	-	New Zealand
NZ\$	-	New Zealand Dollars
NZODA	-	New Zealand Official Development Assistance

ODA	-	Official Development Assistance
ODA/GNP	-	Official Development Assistance/Gross National Product
OECD	-	Organisation for Economic Cooperation and Development
OECD/DAF	-	Organisation for Economic Cooperation and Development/ Development Assistance Committee
OECF	-	Overseas Economic Cooperation Fund
PhD	-	Doctor of Philosophy
PNOC	-	Philippine National Oil Corporation
PRODED	-	Programme for Decentralized Educational Development
RICs	-	Regional Industrial Centres
SCS	-	Special Committee on Scholarships
SEAMEO	-	Southeast Asian Ministers of Education Organization
TIPP	-	Trade and Investment Promotion Programme
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
UNESCO/ UNDP	-	United Nations Educational, Scientific and Cultural Organization/ United Nations Development Programme
UNICEF	-	United Nations International Children's Emergency Fund
USAID	-	United States Agency for International Development
US\$	-	United States Dollars
VISCA	-	Visayas State College of Agriculture
WB	-	World Bank

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INTRODUCTION

Introduction

Education is a necessary component of development, for an educated population will more readily promote national developmental objectives (Gould 1993:1). It will not only satisfy a basic and universal human need, as defined by the United Nations, but will be an investment in world development. Since the advent of the “human capital” theory of the ‘60s, it has been widely accepted that investment in education and training is a crucial factor in economic development. However one conceptualises development, that is, as economic growth, as modernisation, as redistributive justice, or as socio-economic transformation, éducation has a significant role (Mabogunjie 1989: 36-46).

In recent years, the concept of population as a resource has been of growing significance in development studies, and notably in the growing prominence of the term, human resource development (HRD). Its importance is indicated by the United Nations Development Programme’s use of the Human Development Index (HDI) as a measure of development. Human resource development as a strategy requires expenditure that is directed at people to raise their actual and potential economic productivity which is identified here as “quality”. Education aims to raise the productivity of the human resources, and to initially enhance their ability to generate and eventually sustain rising incomes (World Bank 1991). By the mid 1990s, the central importance of human resource development (HRD) has been universally agreed (Serageldin 1995: 27). Harbison and Myers in their study of human resource development aptly state:

Progress is basically the result of human effort. It takes human agents to mobilize capital, to exploit natural resources, to create markets and to carry on trade. Their effectiveness as prime movers depends not only on their own development but on the knowledge, skills and capacities of those whom they lead as well. Thus in a very real sense the wealth of a nation and its potential for social, economic and political growth stem from the power to develop and effectively utilise the innate capacities of the people (Harbison and Myers 1964:13)

People have always been the focus of all development efforts and activities (Todaro 1996; Gould 1993; Berlage and Stokke 1992; World Bank 1991). But often, ambitious development efforts and activities are dependent on the supply of educated and skilled workers. This is at the time when the transfer of skills and technology continues and proves to be a crucial ingredient in the development process (King 1991; Gould 1993; Todaro 1996; Schultz 1972; Becker 1962, 1964; Cohn and Geske 1990).

It is in this light that governments of all Third World countries affirm an educated and skilled population as a necessary precondition for a modern state. However, governments usually invest a large proportion of an often meager budget in education. Economic difficulties experienced by many underdeveloped and developing countries adversely affected their expenditure. During this dilemma, developing countries were supported by bilateral, multilateral and non-governmental donor agencies. Donor agencies provide aid in the form of transfer of finance, resources and skills. In education, they fund scholarships, trainings and more general programmes to strengthen the education system.

But, just how effective is this aid? And what has been the outcomes of education programmes? Comments have been made that it is only in education that “aid becomes a true aid”. Yet, studies focusing on the effectiveness and outcomes of educational aid with reference to the recipient country’s social, cultural, economic and political environments are few. Where studies have been undertaken they tend to rely on project evaluation reports. Few independent studies have been done to evaluate the effectiveness of educational aid in a country’s development.

In view of this, this thesis therefore examines the issue of the effectiveness of educational aid in the Philippines. Specifically, the study determines the outcomes and evaluates the effectiveness of the New Zealand Official Development Assistance Education and Training Programme to the Philippines. It is the concern of this study to take recipients¹ as the central concern, and to examine how recipients of the Third World, individually and collectively have been affected by that educational experience in the international development efforts to achieve improved economic and social well-being.

To examine the main issue, this thesis is divided into three parts (see Figure A). Part I provides an overview which establishes a theoretical framework developed from reviewing the literature on the relationships of aid, education and development. Chapter One reviews the significance of aid in the Third World through the relationship of models of education and models of development. The role of aid and education in the process of economic development is investigated (Part I). Given the variations in the concept of development² context amongst countries of the Third World (Gould

¹ Recipient refers to the graduate educational aid grantee.

² The term development may mean different things to different people (Todaro, 1997:14).

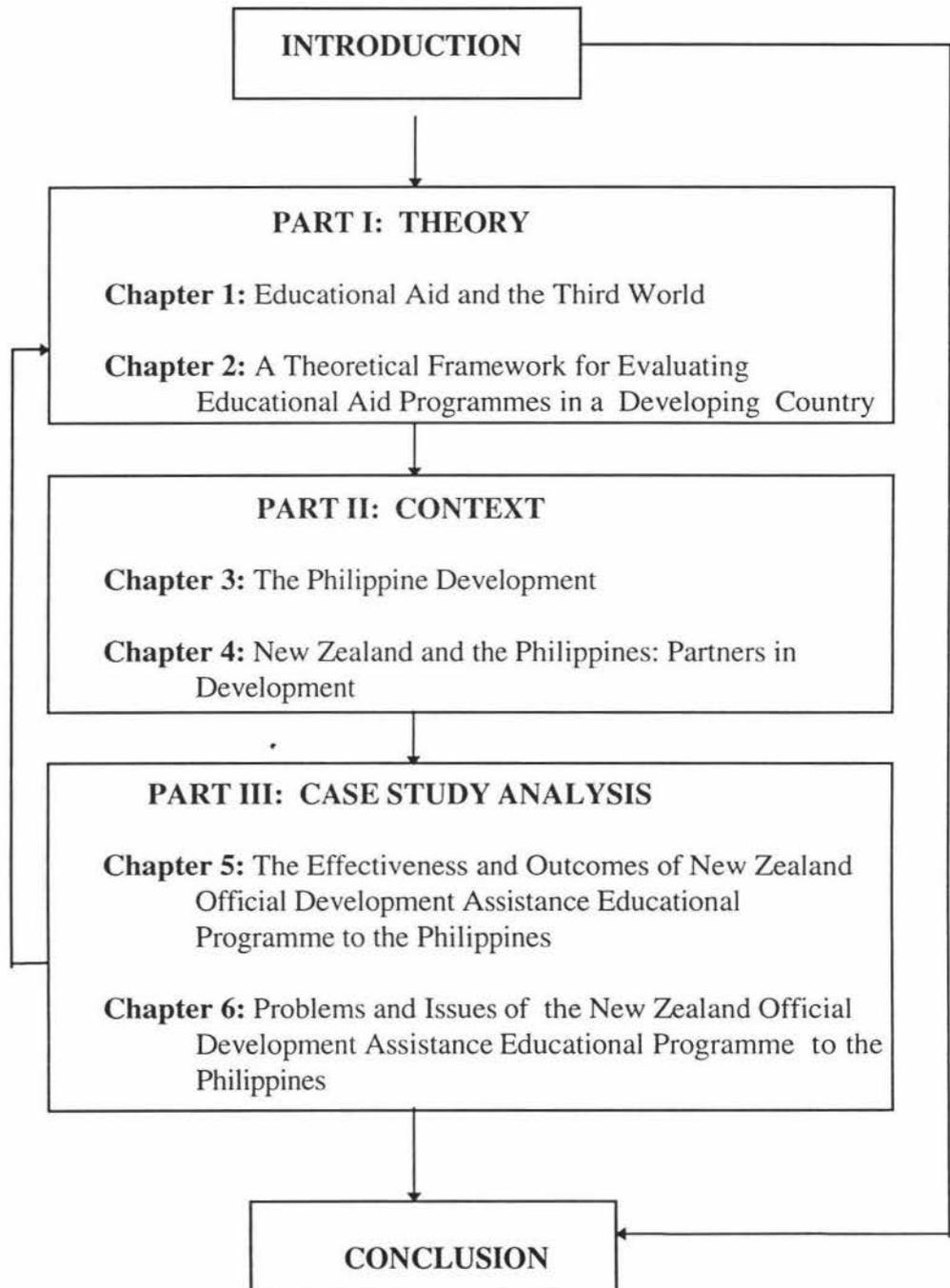


Figure A
Schematic Representation of the Thesis Structure

Note: Patterned from van Diermen 1995.

1993:146), the importance of development thrust, experiences and the role of international relationship of the Philippines specifically with New Zealand are required to be included (Part II). Having considered how aid in education fits within a development thrust, experiences (historical), and international relationship with New Zealand, the effectiveness and outcomes of New Zealand Official Development Education and Training Programme to the Philippines was analysed by examining the responsiveness, relevance and efficiency of the benefits gained from the programme and how these benefits complement each other (Part III). Finally, the issue of the contribution of educational aid to Philippine economic development was examined.

Drawing on the issue of how educational revolutions (Chapter One) have essentially altered the traditional relationship between manual and mental labour, and between skilled and unskilled labour, Chapter Two presents a theoretical framework for evaluating educational aid programme in a Third World country. The chapter starts with the "Human Capital Model" (HCM) and a discussion on the private and social benefits of education. Given the models, benefits, challenges and other issues of educational aid, characteristics of an effective educational aid programme is determined within a Third World system.

Part II establishes the relationship between the theoretical framework and a selection of case studies. Chapter Three introduces the Philippines as a country in which educational aid plays an important role. The chapter discusses experiences, thrusts and perspectives in education in the Philippines. Chapter Four establishes New Zealand and the Philippines as partners in development. Specifically, it examines the objectives, content and delivery of the NZODA to Philippine education.

Part III (Chapter Five) analyses the outcomes or results of the educational aid programme. Chapter Six is a discussion of the the effectiveness NZODA educational programme to the Philippines. The thesis ends with a conclusion and a set of recommendations on how to improve the quality of aid in education.

A Brief Background of the Situation in the Philippines

The Philippine population of 48.1 million in 1980 grew to 67.5 million in 1995 indicating an average growth rate of 2.3%. The population in the Philippines is expected to double by the year 2019 to 128 million. Two-thirds of this increase will occur in the 15-65 year old age bracket, with an average growth rate of 4.5% (IBON 1994; NSO 1995). In the 1995 employment cohort, 27.5 million are in the work-force; of this 25.135 million are employed. In 1988, 55.2% of the population was below the poverty line (NEDA 1992:1).

High levels of poverty, widespread unemployment and underemployment, a large government deficit, low levels of savings and investment (Todaro 1997:594-595), and a massive external debt of \$28.9 billion in 1991 (IBON 1994; NSO 1994) remain as the Philippines' major economic problems. Further, the industrial sector is concentrated in the urban areas, especially in Manila (the largest and capital city). Weak linkages to the rural economy, an inadequate infrastructure, and limitations in transportation, communication and the supply of electricity are major obstacles to economic growth.

Following the recession in 1984-85, the Philippine economy grew at an average of 5.0% per year during the period 1986-89. Again, it slowed again

during 1990-91, but has showed a significant improvement since, attaining a 5.2% growth in 1995 (IBON 1994; Business Review 1995). The increase in GNP (Gross National Product) was fueled by higher level of investments, improved export earnings, sustained consumer confidence and recovery in the industrial sector.

To sustain the country's economic growth, the Philippine government has defined its development framework.³ The ultimate goal of the program is to improve the quality of life for every Filipino through people empowerment. The strategy is anchored on principles of *human development and international competitiveness*. Human development pertains to investment in human capital through enhancement of education, skills training, the provision of health services, and greater access to productive resources. International competitiveness, on the other hand, is the ability to produce high quality products and services acceptable to the world market. The program has adopted two themes: "Global Excellence" and "People Empowerment".

The Philippines, like other Third World countries, is in need of new skills and technology⁴. There is commitment to the belief that education is a necessary component of development (Paqueo 1989), and that education readily promotes national development objectives (Gould 1993:1).

³ A monograph on the Philippine President state visit to New Zealand, 16-18 August 1995.

⁴ Developed countries are the best source of new skills and technology (Coombs 1968).

Methods and Methodologies

The study uses a combination of two or more methods in the evaluation⁵. The research lies primarily in setting up a systematic framework by which outcomes of educational aid can be evaluated. Secondly, it attempts to establish a relationship between the programme components (including delivery) and outcomes, and draws conclusions from these relationships. The question of whether aid attains the needs of the recipient as defined in the objectives (Berlage and Stokke 1992, Stokke 1991a, Gould 1993) was central to this study. Objectives were assessed by examining whether a programme is meeting its objectives as defined in relevant documentation, or by the evaluation of programme implementors and recipients.

The outcomes of the programme were assessed by the use of the 'human capital model' developed by Schultz in 1962, and supplemented by Becker in 1964 (1974, 2nd edition). Results or outcomes are measured through the rates of returns of education (Psacharopolous 1987) or the benefits, (which may either be direct or indirect (Shultz 1962, 1967, 1972; Blaug 1965; Coombs Philips 1968)), accrued both to the individual and to society as a whole. Both quantitative and qualitative data were gathered to address this issue. The situation *before and after* the completion of the programme were analysed. Further, situations *with and without* the programme were compared using the 'direct returns to education' approach developed by Psacharopolous in 1981. The essence of this approach is that education results in direct, measurable returns to the individual and society (Psacharopolous 1981, 1987, 1988; Becker, 1964; Coombs 1985; Schultz 1962, 1967, 1972; Taubman and

⁵ The approach and methods used in the evaluation work have to relate to various aspects of aid and to the kind of questions to be addressed as well, integrating the point of views of both the donor and the recipient (Berlage and Stokke, *Evaluating Development Assistance: Approaches and Methods*, 1992:viii).

Wales 1974; Solmon 1981). The value of educational investment was then measured through the ratio of mean annual earnings of the cohort receiving a higher level of education (with training situation) and the cohort receiving a lower level of education (without situation). The quantitative data was analysed using the formula (see discussion on Chapter VII) developed by Mincer in 1974; which says that the higher the ratio of rate of return, the larger the return to investment in the training.

Combinations of qualitative and quantitative methods were used in the analysis of the effectiveness and outcomes of the New Zealand Official Development Assistance Educational Programme in the Philippines. The Chairman, programme officer and other staff of the Scholarship Committee chaired by the National Economic Development Authority (NEDA) were interviewed, being the representative of the Philippine government. The programme officer of the New Zealand Embassy in Manila was also interviewed. Important and/or confidential documents were either shown or given to the researcher. A survey questionnaire was administered to all the graduates or and persons who have received the educational aid. A total of 79 completed questionnaires (in English)⁶ were gathered, which is 64.3% of the total number of graduates. A summary of results is shown in Appendix A. A total of 34 graduates were also interviewed using the semistructured interview techniques. Interviews were conducted in person except for five graduates whose places were inaccessible to the researcher. Interview with these five graduates were done by the telephone.

⁶ While there are over 100 regional languages in the Philippines, the national language is Filipino, with English as the most widely spoken second language. All businesses, governmental and legal transactions are conducted in English. Furthermore, educated Filipinos tend to understand English better because it is the medium of instruction.

The questionnaire for the graduates was modified as a result of advice given by colleagues who had studied in other countries under ODA funding. Questions were developed to include the changes brought about by the educational aid. This includes earnings and productivity, and other activities related to their work. In addition, questions on the costs and the effects of the education programme were asked. Questionnaires were administered through the mail. Questionnaires were mailed twice for each graduate using two addresses; their work address and home address. This was done anticipating that in some cases the graduate may have transferred to another work place or another home.

Responses to the questionnaires and semi- structured interviews served as the primary sources of data for the study. All data collected was tabulated and analysed using the Excel package. The effectiveness and outcomes of the educational aid in the Third World system was analysed in relation to the relevant studies and literature (refer Part I).

Part I

Theory

Part I provides an overview on the importance of education to development in general, specifically the importance of aid education and role in development; and a theoretical framework for evaluating educational aid programme. Part II is divided into two Chapters. Chapter One presents the Human Capital Model and its importance in education. Moreover, it presents the private and social benefits derived from education by the individual and the society. The review on the challenges and characteristics of an effective educational aid programme provides the theoretical framework in evaluating educational aid programme. Chapter Two presents the theoretical framework that is used in the evaluation of the New Zealand Official Development Assistance (NZODA) Education and Training Programme to the Philippines, as the case study in this thesis.

CHAPTER ONE

EDUCATIONAL AID AND THE THIRD WORLD

Introduction

This chapter provides an overview of the significance of educational aid to the Third World. The chapter reviews the major theoretical positions on development and education, and identifies approaches to development through education and aid, and outlines a perspective on educational aid.

Aid and Development

In the early post- World War II period, foreign aid was justified primarily as a national security measure, that was needed to strengthen allies and to build up low-income countries so that they would be less vulnerable to communist invasion or take over. Initially, economic aid commitments to less developed countries were believed to be necessary to make some military pacts more acceptable. Regardless of the rationale, subsequent investment was invariably required to protect the initial investments.

In the 1960s, security was more broadly defined. Less emphasis was placed on the quest for military allies and development was given a higher place, although by no means an overriding priority was given to it in foreign assistance efforts. The 1970s saw vast changes in the global political and military landscape, in the economic scene, and most especially in the worldwide understanding of the nature of the development process. Since then, development has undergone various changes, not only in its definition but also in its perspectives and processes.

Aid, specifically those bilateral programmes, began with quite different and mutually inconsistent rationales such as: maintaining historic ties with colonies and associated areas that had gained their independence, achieving international

respectability, extending political influences, winning new markets, paving the way for private investment, or simply by desire to help those in need. Today, aid is recognised as an arm of foreign policy, an economic instrument that can be used to ultimately serve political ends besides being an expression of goodwill and mutual cooperation among nations concerned with international development.

It is in this regard that the issue of foreign aid takes a greater significance in the development efforts of underdeveloped countries. However, it has been realised (DAC 1989; King 1991; Reyes 1986) that aid, on the average, has accounted for only about 20% of the investment resources of the undeveloped countries. Thus, the vital question is not just how efficiently the 20%, in and of itself is used, but how effective it has been in building institutions and in the promotion of policies that help improve the overall use of a country's resources, including those both human and natural.

On the issue of the effects of aid, economic traditionalists argue that aid has indeed promoted growth and structural transformations for many underdeveloped countries, while others argue that aid does not promote faster growth but rather exacerbates undeveloped conditions through balance of payments deficits as a result of rising debt repayment obligations and the tying of aid into the exports of donor country⁷. In the '70s- '80s, aid had been associated with problems of population, unemployment, inflation, government deficit and balance of payments. The expression of aid weariness was often used to describe the attitude of developed countries toward foreign assistance (Todaro 1997). Aid often only benefited small elite groups in the underdeveloped countries, thus widening the gap between the rich and the poor. In some instances, like the Philippines, the rich became richer while the poor became poorer as a result of corrupt bureaucracies.

⁷ See, for example, Hollis B. Chenery and Nicholas G. Carter, "Foreign Assistance and Development Performance," *American Economic Review* 63 (1973) : 459- 468.

Aid has been greatly effected by the structure of inequality among societies in the world economy dominated by the developed countries. It is in this issue that it has always been a part of the set of objectives of aid to reduce this inequality down to the most rural people of the underdeveloped country. As the decades went on, and as evidenced by mixed issues on the impact and outcomes of aid, donor agencies became more and more concerned with the development of their own aid projects and programmes. This also led the way to the birth of empowerment or development from below.

There is a great deal of literature on the positive and negative impacts and outcomes of specific aid projects and programmes, which this thesis will use to examine in detail the educational assistance package by way of a case study. The study examines educational assistance because of its perceived significance to the construct of development.

Models of Education and Mòdels of Development

Education can be measured by such different measures as the amount of learning or by attendance at school; it can encompass a wide range of features in its content and organisation, in terms of the range of the students' experience in school and the impact of that experience after he or she leaves school. Education has impacted significantly on all aspects of the development process. These educational experiences have affected people individually and collectively in different ways. Interactions and experiences as effects of development processes have had major influences over wide areas of public life during the past decades. Conversely, the strategy and purpose of development has impacted dramatically on the education system (Gould 1993:202).

Education has been widely taken as the prime mechanism for economic and social development in many countries (Coombs 1985; MFAT 1995; Schultz 1972), with measures to expand the number and improve the quality of

educated and skilled humanpower⁸ as an important component of national development. More education requires more formal education, but the form and content of education differs enormously from one developmental context to the next. In different countries at any one time, and at different periods in the same country, the contribution of education to development has varied (Schultz 1972; Psacharapoulos 1987; Coombs 1985).

Education is an issue of great concern to the governments and people of the underdeveloped countries. Investment in education has brought benefits to individuals, their communities and society in general. Benefits have ranged from improved level of knowledge and skill in the population, better quality of human resources, more choice for people over their lives, more secure economic future, and access to well paid jobs in the modern sector. Investment in education has proven to be beneficial to many, but not for all. There is no assurance that new skills and knowledge are always put to sufficiently productive use, or that the individual is suddenly liberated from a range of social and cultural constraints (Gould 1993:204). Education has brought the universalist ideas and knowledge of science and technology to many people, but it has failed to ensure the availability of new techniques and machines for the use of that knowledge. Nevertheless, the uncritical acceptance of western models of education have had negative impacts on Less Developing Countries (LDCs). For example, it has influenced migration patterns, the national and trans-national brain drain of skilled workers, and has led to the growing number of unemployed graduates, and widened the difference between rural and urban sectors.

In theory, education can be a liberating force, but in practice it has also been a force for stability and preservation of the *status quo*. White collar jobs are preferred by the educated. In effect, education often fails to produce the skills and technology needed for development. There has been mis-matches between

⁸ Humanpower is referred to as 'human resource' in this study.

what was actually needed by the country for their own economic and social reforms, and what has been provided by western education systems.

For several New Industrialised Countries (NICs), economic transformations was not seen as being led by education reforms but rather, the reverse transformation required the restructuring of education. This has been the experience of South Korea (Hong 1983:225; King 1984:10), Taiwan (Todaro 1997) and Singapore (Chew 1986:133), where a very rapid increase in scientifically oriented and technically skilled workers was required. For example, Chew (1986:133) reports that “management in the electronics industry generally places a lot of emphasis on up- grading of human capital.” The role of formal technical education as a factor in the economic dynamism of East Asia is contributory rather than dominant, and certainly much less dominant than the role of foreign capital and internal political stability (Gould 1993:205). Although there have been many changes in curriculum, structure and finance in education in the mass countries of Africa, Latin America, South Asia and Middle East, there have been very few attempts to alter attitudes towards education, either from within or from outside the education system (Fransman and King 1984). The education system ensures social reproduction rather than being a vehicle for social change or economic dynamism (Coombs 1985; Zwanaepoel 1985). Education may continue to function and exist even when a national state collapsed. In the Philippines for example, (a Third World country with low score⁹ on the UNDP Human Development Index (UNDP 1991)), the school system remains in place¹⁰, but its quality has seriously collapsed at all levels. Teachers are paid extremely meager and much devalued salaries. In effect, the majority of teachers spend most of their time outside school earning additional income. Many of them have left the country and became overseas workers. Schools are being commercialised. There are

⁹ Philippine HDI score is 0.613, where HDI score is from 0 to 1 (New Internationalist 1993/1994: 70).

¹⁰ Literacy rate is 90% male, 90% female (1990), while school enrollment (1989) are as follows: primary 111% male and 110% female, secondary 72% male and 75% female, and university 2,659 students per 100,000 inhabitants (New Internationalist 1993/1994:483).

more private schools than government owned schools. Government school buildings decay, and there is not enough expenditure on learning materials.

Education is an important tool for development planning, especially for politicians. In general, education has been consistently aligned with national ideologies for development (Gould 1993; King 1991). In any development agenda, whether at the international or national level; public or private activity, much aid and technical assistance is given to education. But international agendas seem to be affected by global powers and trading relationships, and that makes singularly educational initiatives and perspectives difficult. They can act only within the boundaries of the relationships, no matter how good the initiatives are, or how well they are politically and financially supported from within and outside each country. Although each country has its own priorities and objectives, it can act only within the boundaries of its own national, political, cultural and social development strategies, as well as being controlled by the constraints of structural adjustment and growing indebtedness (Gould 1993:206; Mallillin 1981:5).

In essence, the value-added benefits derived from formal education may not be as equitable as the economists' calculation of rate of return. Generally, the direct effects of education may have been overstated in the economic models of development invoked to underpin policy strategies of governments. For governments of the Right, investment in education has sought primarily to support modernisation in the economic sphere and to maintain social stability, while for the governments of the Left (liberal), it has sought to promote economic change and equity, but with greater emphasis on the latter. For socialists, education has been seen as the root of social and economic change. While following different development strategies based on widely differing conceptions, underdeveloped countries have been caught up by imposed constraints on educational priorities and growing indebtedness. This signaled the conception of the universalist and diffusionist models of development, as products of their operations of the multilateral and bilateral aid agencies. In

education, this implies an assumption that Third World countries are being positively affected in their development by the operations of the development/education relationship that seemed to apply in the developed countries. But as education systems in developed countries were different in strategies, priorities and emphasis, so were they in the Third World.

For this issue, therefore, it can be generalised that 'development' models are similar to education models. Approaches to education are deeply rooted in the modernisation perspective that assumes easy and necessary cross-cultural transferability of the institutions and content of education. The idea of efficiency, that is, the maximisation of benefit and minimisation of cost is an essentially positivist approach. Hettne (1990) argued that 'development' strategies and approaches in the undeveloped countries have been characterised by three basic features: they have tended to be exogenously based; they have been rooted in a positivist ideology derived from the rationality of classical economic theory; and they have been essentially evolutionary, following the presumptions of the Western development model based on stages of growth. The assumption of an approach to global development using universally applicable theories and practice has been a characteristic feature of the second half of the twentieth century, and these theories have been largely based on the three characteristic features.

A more satisfactory outcome of development efforts will come only when the models on which strategies are based are endogenous, normative and neo-populist (Hettne 1990). In this view, new theories are needed. These new theories need to be rooted in the wants and experiences that are related to the basic culture, philosophies and values of the population in which development is planned. As such, a nation state may not be the ideal unit of account for it undermines local needs and differences. Thus appropriate models can be facilitated by institutions and structures that gives people a sense of 'ownership' of their development process, that is, through participation and empowerment.

The models of education that have been followed have certainly been mostly exogenous, borrowing heavily from a modernisation perspective which assumes easy and necessary cross-cultural transferability of the institutions and content of education (Gould 1993:208). The structural experiences of the West, as well as its institutional forms that are inherited from the colonial period and its assumed relevance to the development of Third World countries have remained at the fore end of the twentieth century. The historical experience of education in the industrial world of manufacturing, supported by cheap labour forces is unlikely to be repeated in any part of the Third World, as their modern economic needs have a different skill mix and skill levels. Just as there has been a general rejection of the diffusionist paradigm in development theory and a growing recognition of the possibilities for, or even desirability of indigenously derived development strategies, so too this has occurred in education. There are possibilities for a range of locally defined strategies and modes of delivery of primary/ secondary/ higher, rural/ urban, academic/ technical certainly. Many cases of national experiments for innovation seem particularly constrained by two aspects: externally by the conditionality of 'aid' programmes and multilateral and commercial loans, and internally by the demand from parents for familiar, traditional forms of education for their children.

Inherited models, however, are hierarchical, bureaucratic and centralised. During the 1950s-1980s, when development planning came to the forefront among the Third World countries, various sub-sectors including education were integrated into a national strategy with defined targets and objectives. Although the education system expanded¹¹, the management of the larger system involved deconcentration of administration down the hierarchy to regions, provinces, districts or towns rather than decentralisation of policy and implementation decisions. Management structure has been top-down,

¹¹ In education, expansion is through additional schools, teachers and enrollments.

specifically in financial matters. In effect, education has not heard or included its own clientele, the 'people' in its planning and management.

In view of this, Hettne (1990) argue that theories, to be more effective, should be locally ordered, more related to local cultural realities and aspirations, and more flexible in their delivery. He further argues that in doing so, then the education system would be more at ease with a new ideology of development that was sensitive to spatially variable needs and the aspirations of a population. This would probably mean, among other things, much greater decentralisation with stronger local powers. It would also mean much less dependence on formal and adult education, more on-the-job training and a much more radical curriculum in schools. In essence, emphasis should be given to education¹² without denying the continuing importance of a formal school system.

In conclusion, such types of development are rather idealistic, given the pressures for continuity and conformity from above and from below. They would possibly result in an ever greater diversity of national experiences in education and in the impacts of education on the socio-economic life of the nation. Human resources would be developed in a way that allows the system as a whole to be more responsive to local or indigenous circumstances rather than to macro-economic requirements. They would consider people's basic needs. The effect may not be as direct, but the perceived change in the population components is possible as affected by the restructuring of values in the new ideology, emphasising the locally relevant skills that are needed to raise the quality of life of the population. Such changes could further develop dynamism and vitality among the rural areas of the Third World that could address the issue between education and migration. For the Third World, being more self-sufficient creates less incentive for internal and external brain drain. Better provision of basic needs would relate education more directly, both geographically and in terms of control and responsibility, to the people

¹² Education is defined in this thesis as different from schooling.

they seek to serve (Gould 1990a). However, policies of efficiency and decentralisation in education, as associated with structural adjustments, could possibly move thinking about education and development away from these approaches, specifically in economic and major international development agencies that are rather universalist in view of education-development relationships. They could move towards views that are more consistent with approaches of geographers and that of the grassroots levels throughout the Third World, that recognise the importance and practice of education. In such case, it would be important to be more concerned to examine the contextual variables that differentiate one country from another or one region from another than to impose an efficient general solution that would have equal applicability and maximum impact everywhere. This perspective is able to be related to the issue of educational assistance¹³, that is, the individualities of both the recipient and the donor countries should be considered. Such thinking on the issue of models of education and development is deemed important and related to the study of specific countries' development or underdevelopment.

Case Studies of Educational Aid and Development

In this study, countries such as Japan, Singapore and Indonesia are considered models of education and development. Although these countries are certainly not the ideal types in the strict sense of the 'concept of development', they furnish glimpses of varied development patterns that some underdeveloped and developing countries may or may not have experienced. As such they have been included as case studies illustrative of some principles that link education with development.

Singapore

Pang (1980:495-504) describes Singapore's economic development and growth over the last 20 years which has led to a virtual full employment economy with rising per capita income and standards of living. The author

¹³ Education is funded by aid, either by bilateral or multilateral agreement.

attributes this almost unique success to a combination of factors: (1) political and social stability allowed for the development of a market economy guided by macro-economic planning; (2) of particular importance was the government's emphasis on manpower training to continually upgrade and to improve worker's productivity; (3) the country adopted an outward looking export oriented economic policy. Interdependence did not lead to one sided dependence but provided Singapore with the necessary technology and resources for development; and (4) macro-economic policies capitalised on the country's comparative advantage through subsidiaries. Labour intensive technologies gradually shifted to more capital intensive technologies as labour became more scarce. The combination of pursuing rapid economic growth and investing heavily in human resources is considered the key to Singapore's success.

Japan

It is believed that the key to Japan's rapid economic development is its people (Muhi et al 1986:58). The Japanese have displayed an ability to assimilate and adopt new ideas to their own needs. Although Japan depends on imports for its key raw materials it has become the world's third steel producer. This growth is due to the tremendous progress made in modernising equipment and facilities, and technology. Japanese technicians have introduced new technology, both imported and developed locally. Japan's success in economic development is heavily based upon its many highly trained scientists, engineers and technicians. They keep abreast of scientific advances in other countries through professional journals, foreign study and travels, and international conferences. The Japanese government is providing more money for investments in industries and education. Thus, in general, Japan's success is due to its "*quality human resource*".

Indonesia

Indonesia, is one developing country that is heavily investing in education, specifically on youth education. This is based on the concept that youth is a potential wealth (Muhi et al 1986:60).

Following the abortive Communist coup on 30 September, 1964, Indonesia has launched some realistic economic policies (Indonesian Information Service, Indonesian Embassy, Manila, n.d.). This was followed by Indonesia's Five-Year Development Plan of 1969-1974. With the conclusion of the first Five-Year Development Plan in 1974, Indonesia has embarked on another second Five-Year Development Plan which emphasises development in the areas of (1) Tourism; (2) Infrastructure; (3) Regional Organisation; (4) Personnel Development; and (5) Mass media support. As part of the development of the country, the government has likewise built a sound basis for proper economic growth. The rate of inflation which has been discouraging in the past years is now improving. On the whole, production has improved from the start of 1968. Another important development is focused on agriculture. To cope with employment, the planners envision renovations and changes in agricultural technology through improved education, both local and foreign. Although many of the economic objectives set in the first Five-Year Development Plan were successfully achieved, Indonesia recognises the shortcomings of past developments, in which education has a significant role. Like other developing nations, Indonesia is fast adjusting to changing times in the fields of health, employment, capital participation, business, and more specially in education. In Indonesia, the envisioned support and cooperation of the educated population, specially its youth, are significant in the exploitation, manipulation and development of Indonesia's potential wealth.

Given the Singapore, Japan and Indonesia's experiences in development, it is evident that education and training of people, whether overseas or local is one of the key factors in the development of the "human" as a "resource". It is in this light that education is receiving so much aid or assistance. The role of

educational aid plays in development is the focus of this thesis, specifically in the form of a case study of the NZODA to the Philippines; this is discussed in the next section.

The Role of Educational Aid for Development

Education has long been recognised as a central element in development. When the more developed countries began their drive for social and economic development more than 30 years ago, education was perceived as a means not only of raising political and social consciousness, but also of increasing the number of skilled workers and raising the level of trained manpower. Although substantial progress was made during the 1950's, educational growth failed to achieve a more equitable distribution of income and social services, and resulted in disequilibrium between the productive capacity of the education system and the absorptive capacity of the labour market (Woodhall 1987).

The 1960's witnessed profound changes in the perfection of the development process as the developing countries began to experience the unprecedented effects of industrialisation especially upon the rural areas. They began to perceive that development was not just national economic growth and efforts were directed towards improving the welfare of human beings, primarily in terms of providing goods and services needed to eliminate manifestations of poverty, such as: malnutrition, disease, illiteracy and squalor. These efforts were spurred on by the 1970 resolution of the United Nations General Assembly stating that

"...as the ultimate purpose of development is to provide increasing opportunities for all people for a better life, it is essential to expand and improve facilities for education, health, nutrition, housing and social welfare and to safeguard the environment" (World Bank 1980:12-15).

These efforts soon became the nucleus of overall national and international development efforts since the development of human resources not only helps alleviate poverty but also contributes significantly to growth in national

productivity and income. This comprehensive approach to development underlines the significance of educational aid in three inter-related ways, namely:

1. As a basic human need. People need education to acquire a broad base of knowledge, attitudes, values and skills on which they can build in later life. Such education provides people with the potential to learn, to respond to new opportunities, to adjust to social and cultural changes, and to participate in the political, cultural and social activities.

2. As a means of meeting other basic needs. Education influences and in turn is influenced by access to other basic needs such as nutrition, safe drinking water, health services, and shelter. For instance, while clean water can make an important contribution to better health, for instance, whether it will do so, depends on the education and understanding of its users.

3. As an activity that sustains and accelerates overall development. First, education prepares and trains skilled workers at all levels to manage capital, technology, services and administration in every sector of the economy. Second, through trained personnel, developed methodologies and institutional settings, education facilitates the advancement of knowledge in pure and applied fields. Third, as the concern for the management of the environment, for conservation and the use of energy, and for achieving a balance between human population and natural resources mounts, education will raise the consciousness of people and provide knowledge, skills and trained manpower to deal with environmental issues. Fourth, the ability of the individuals to identify with their changing culture and find constructive roles in society, depends, to a large extent, on what education can provide by way of self-understanding, better knowledge of the choices available to society, and a critical view of the culture.

Therefore, in this respect, education is referred to not only as a sector of development, parallel, for example, to agriculture or industry, but as *a pervasive element that is integrated, horizontally and vertically, into all development efforts.*

Education, for example, in the broadest sense, is a major objective of technical co-operation (TC) programme. Official Development Assistance (ODA), which refers to grants and soft (concessional) loans extended by governments of developed countries and by multi-lateral official agencies to developing countries; in general, aid is provided either for capital or technical assistance purposes. Foreign capital assistance is an important development input into a country, specially to the developing and underdeveloped ones. While labour is generally abundant, highly skilled labour (or technical expertise and experience in certain fields) is also equally important.

The Challenges of Educational Aid in Today's Development

There is nothing new in a country seeking help from abroad to meet its manpower needs through new technologies and skills. And as far back as the 18th century, organised fund raising usually of a private nature was used to help education in the underdeveloped countries. It was only in the later 1920's that government to government programmes of educational aid became substantial. Today, more than 35 countries are helping to educate the people of underdeveloped countries (OECD, 1994:8) by supplying teaching materials, teachers, fellowships, equipment and/or cash in the forms of loans and grants. These are added to by literally hundreds of philanthropic organisations and foundations which also export educational assistance. The creation of the United Nations (UN) and World Bank (WB), developed a permanent machinery in a formal structure for collective educational assistance on an international scale.

Education in the Third World became a substantial aid recipient-some US \$2.5 billion a year of Development Assistance Committee bilateral commitments. In recent years, the World Bank and International Development Association (IDA) approved some US \$700 million of loans for education (OECD DAC 1984; World Bank 1984). Although a huge amount has been allocated to education, it probably accounts for only 10% of all aid budget of the developing countries (OECD-DAC 1984). Official bilateral aid to education comes principally from Organisation for Economic Cooperation and Development/ Development Assistance Committee (OECD/DAC) countries. Almost 80% of the aid to education from bilateral aid assistance sources and from most specialised agencies of the United Nations goes for technical assistance-teachers, experts, advisers and fellowships for students and trainees. Among the multilateral agencies, the World Bank Group (including IBRD and IDA) is the largest single multilateral supplier of educational aid. Such priorities in this type of assistance reflects the perceived role of education as providing the economy with skilled manpower and the many other social benefits that go with it.

However, it is not a matter of how much aid is given to education, nor the role and influence of aid moneys in national development. Rather, as King (1991:ix) argued, educational aids' contribution to development is commonly based on the donors' perspectives on education and this is what really matters. Educational aid, despite its obvious benefits have contributed to the educational crisis in two substantial ways. First, they have heightened and accelerated the already strong popular demand for education, and secondly, following King's argument, often, undeveloped countries are encouraged and enticed to emulate the donor countries' own educational models and practices-even when they are conspicuously ill- suited to the needs and circumstances of the imitating countries.

For decades now, donor agencies and recipient countries acknowledge these effects. Today, both donor and recipient agree not only on the question of

what has been accomplished or not accomplished by educational assistance, but also on what has been learned from the past experiences that can now be put to good use in the task of shaping a better future. Past experiences resulted in the inclusion of issues such as gender biases, rural-urban development, and private-government development. These issues, then, were used as the basis of the analysis of the case study in this thesis.

CHAPTER TWO

THEORETICAL FRAMEWORK FOR EVALUATING EDUCATIONAL AID PROGRAMME

Introduction

This chapter presents a theoretical framework for evaluating an educational aid programme in a Third World country. It includes discussions, publications and studies that were conducted in relation to human capital theory and the benefits derived from the educational aid programme. The chapter begins with the discussion of the human capital theory and the human capital approach, followed by the discussion on the educational benefits, benefits imbedded in the goals and objectives of an aid programme with respect to education and training as espoused by the Human Resource Development concept, the characteristics of an effective educational programme and the expected benefits from it. It also provides views critical to the prevailing assertion that income and success is related to education. Given the constructs, the chapter ends by presenting a theoretical framework.

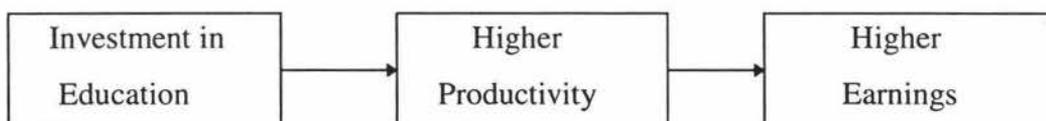
Human Capital Theory

Many economists have pointed out that education and training create assets in the form of knowledge and skills which increase the productive capacity of manpower in just the same way as investment in new machinery raises the productive capacity of the stock of physical capital. In 1776, Adam Smith in *The Wealth of Nations* said that “a man educated at the expense of much labour and time... may be compared to one of those expensive machines”, and other classical economists observed that expenditure on education could be

regarded as a form of investment that promised future benefits. In the early years of the twentieth century the Russian economist Strumilin (1924) and economists in the United Kingdom and Europe drew analogies between investment in education and investment in physical capital. However, it was not until 1955 and continuing to the present day that there was large scale support for the idea that expenditure on education represented investment in human capital. One writer reviewing the theoretical and empirical work on the subject has described it as “the human investment revolution in economic thought” (Bowman 1966). Economists such as Schultz (1961, 1971) and Becker (1975) have developed and analysed the concept of human capital, treating education and training as a form of investment, producing future benefits in the form of higher income for both educated individuals and for the society as a whole.

The Human Capital Approach (HCA)

The concept of Education as investment is most clearly set out in the HCA. The basic premise of the human capital approach is that variations in labour income are due, in part, to differences in labour quality in terms of the amount of human capital acquired by the workers. Investment in human capital leads to higher productivity, which in turn causes higher earnings as shown in Figure 2.1.



The Human Capital Approach
Figure 2.1

Source: Cohn and Geske 1990:35.

An important facet of the human capital approach is investment in 'on the job training' and the criteria determining who will pay for such training and who will benefit therefrom (Harris and Jarrett 1990). Based on the pioneering work of Becker (1962, 1964), a distinction is made between 'general' and specific training. 'General' training refers to training that provides valuable knowledge and skills to workers usable both within the present employment (where training takes place) and in other employments. However, 'specific' training has value only within the current employment and is totally irrelevant for the workers productivity in other firms. In the first instance, the theory predicts that the worker will be willing to pay for the general training (in the form of reduced income during the training) and that the employer would be willing to pay the worker a higher wage following the training. For specific training, the worker is not likely to agree to pay, and likewise, the employer is not likely to pay a higher wage to a worker trained in such a manner. This last statement is altered to some extent when it is recognised that employers investing in specific training of workers are reluctant to let them go and thus are likely to pay them a higher wage to retain them. Similarly, the worker may not object to paying for some of this specific training when it is realised that such training would bring a return in the form of greater job security and higher wages. Empirical corroboration of this view can be evidenced (see for example the work of Mincer 1970, 1974).

Human Resource Development

A relevant concept for this study, is that of Human Resource Development (HRD). The increased prominence of Human Resource Development (HRD) has been associated with new ideologies in economic analysis, styled by Toyne (1987:5) as a 'counter-revolution in development theory and policy'. Specifically in the Third World, the New Right has moved to centre-stage in

economic thinking, this has introduced new ways of thinking about the role of individuals and their skills in the development process. This thinking has been led by such organisations as the International Monetary Fund and the World Bank. One of their main ideologies is the thought that human resources encompasses all of the many attributes of a people, that is, their physical, biological, psychological and cultural components. These account for both the social values that determine preferences and the economic value of the producer and consumer services that a people render, whether they come to them as earnings or directly as personal satisfactions (Schultz 1972:9).

Much of the analysis concerning HRD is related to the idea of the value of education to the individual and to the society, which is far from new (Cohn and Geske 1990:18). However, an emphasis has been placed upon the economics of health, education, and other human resources. Adam Smith in 1776, as well as several other economists like Ginzberg (1966), Von Thunen (1968), Alfred Marshall (1890), Blandy (1967), James Dodge (1904), E. A. Caswell (1917), Gorseline (1932), J. R. Walsh (1935), Dublin and Lotka (1946), Psacharapoulos (1987), Harris and Jarrett (1993), World Bank (1994), United Nations (1995), agree that education confers both direct and indirect benefits upon the individual receiving the education and the society to which this individual belongs. Smith (1952) believes that without ample education, the masses of working people would be so alienated from the society and that the principle of the 'division of labour' would be threatened.

Marshall (1961) pointed out that education not only helps the individual to improve his life within each social class but also acts as a buffer between social classes. It is the means to achieve social mobility. His arguments for public support of education is based, in part, on the alleged existence of indirect, or external, benefits:

'We may then conclude that the wisdom of expending public and private fund on education is not to be measured by its direct fruits alone. It will be profitable as a mere investment, to give the masses of the people much greater opportunities than they can generally avail themselves of ... And the economic value of one great industrial genius is sufficient to cover the expenses of the education of a whole town... All that is spent during many years in opening the means of higher education to the masses would be paid fir if it called out for one more Newton or Darwin, Shakespeare or Beethoven (I:216).'

The focus on human resource and human capital points out the task of conceptualising and valuing education through the possible and perceived benefits that could be derived from it. This includes the benefits derived from education as a source of economic growth. There is, therefore, a need to review the benefits derived from education (including actual results), this is the concern of the next section.

The Benefits of Education

T. W. Schultz (1963:39-42), listed a number of categories of educational benefits. These include economic benefits obtained from educational research, the cultivation and discovery of talent (potential), increased "capability of people to adjust to change in job opportunities," the preparation of teachers (a self-sustaining activity), and the provision of humanpower for sustained economic growth (Schultz 1963:39-42). In addition, education provides for better citizenship, the ability to appreciate and recognise a wider range of cultural and other services, reduced reliance on the market for such services as the filing of income tax returns, and a chance to give the next generation better education and, therefore, a better future.

However, Solmon (1987:83-92) suggested that for all levels of education, the discussion of educational benefits must begin by asking a number of questions.

The first of these is who will benefit?; as there are a number of potential beneficiaries from the educational process. Solmon (1987:86) suggested that the first and most obvious is the student. However, Psacharapoulus (1987:15) argued that benefits would be difficult to identify in a homogenous way due to the individual characteristics of the students that may either help or impede students to achieve their goals. Thus, Psacharapoulus suggested that individual characteristics of the students should be considered in conjunction with the benefits. In addition, the next group of beneficiaries of education that must be considered are those others in the society (non-students) who may or may not invest in the education of the students either directly (as in the case of family and friends, professors/teachers) or indirectly as in the case of individuals who support education by paying taxes). Given the two groups of beneficiaries, perhaps there is a third beneficiary that can be applied in this study. The third beneficiary therefore is the donor country.

Benefits to individual are relatively easy to conceptualise (Solmon 1987:84). For example, the student who learns new irrigation techniques is better off than before, if he or she did not know about the new irrigation techniques and is able to utilise them in a profitable way. In economic terms, this is known as the private returns of education (Psacharapoulus 1987:12). Economists distinguishes private from social benefits where the latter accrue to others than those being educated.

Most of the literature on the benefits distinguishes private and social benefits. "Private" benefits are those benefits that are retained by the individual being educated, while "social" benefits include those that the individual cannot appropriate and that are therefore absorbed by the other members of society (Solmon 1987; Becker 1972; Psacharopoulus 1987; Schultz 1962, 1964).

Basically, there are two types of benefits that belong to the social but not to the private domain (Psacharopoulos 1987). They include (1) tax payments associated with the educational benefit (i.e., higher income taxes paid out of one's lifetime income stream), and (2) "external" benefits, which are those benefits that are due to the educational investment but that the individual cannot capture (Psacharopoulos 1987, Cohn and Geske 1990). An example of the external benefits of education is the ability of the government to rely on individual filing of income tax returns, which would be impossible to achieve without general literacy. Similarly, mass production of books and magazines, resulting in the availability of a great variety of such media at a relatively low per unit cost, is another result of education. There are numerous other daily functions that are taken for granted but that would be impossible to accomplish without an educated population. Solmon (1987) and Psacharopoulos (1987) argue that the most important external benefit of education is the development of an informed citizenry, without which democratic institutions could not survive.

It is appropriate to introduce another concept related to the importance of the returns of education, which is known as the intergenerational effects of education. These are the possible educational benefits that will be felt only a generation later (Schultz 1962, 1964; Solmon 1987). The alleged intergenerational effects of education stem mainly from studies showing that persons are more likely to complete a given level of education if their parents are (or were) more highly educated. The intergenerational effect is the increment in a person's education that can be ascribed to the incremental education of the parent. In simple terms, the assumption here is that increased education results in increased potential income. This implies that some of the higher expected earnings of the children can be traced back to their origin in the increased educational investment by the parents. However, given this idea, it

could also be argued that the present person's increased education will have an effect on his or her future children. If the investigation of the benefits of education is confined to the parents only, some (perhaps serious) underestimation of benefits would result. However, there is a possibility of double counting a person's educational benefits, once in the calculation of one's own educational investment, and then once more in calculating intergenerational benefits.

From the above discussion it is clear that there are some benefits that are easier to identify than others. Economists, in their constant desire to conduct Cost-Benefit Analysis, tends to look at benefits that can be evaluated in monetary terms. But for social science researchers, monetary benefits are only one type, to be considered in the total assessment of the value of education. Thus, some researchers such as Psacharopoulos(1987), Harris and Jarrett (1990), Solmon (1987) argue that the real question of educational benefits is a question of what changes result from the educational experience. Methodologically, this implies that pre and post measures on individuals are required so that changes during the educational experience can be identified. This has come to be known as the value added approach (Solmon 1987; Psacharapoulus 1987, Coombs 1986; Zwanaepoel 1985). In essence, knowing an individual's initial attributes and aptitudes would lead to a predicted achievement in some aspects. At the end of an educational experience one could determine actual achievement. By comparing the actual to the predicted achievement, one could see what the impact of the educational experience was.

However, even when that is done, if such change is observed, it may not be attributable to educational experience alone. Certain changes in individuals may be the result of normal maturation, or a function of such diverse factors as changes in national economic condition or budget plans (Psacharapoulus 1987).

Specifically, such factors could be applied to grantees of educational aid programmes. Such factors will be looked at in the analysis of the case study in this thesis. Together with these factors, the characteristics of an effective educational aid programme in general will also be looked at. This is the concern of the next section.

Characteristics of an Effective Educational Aid Programme

The characteristics of an effective educational aid programme can be best explained by the phrase '*evaluation of educational assistance.*' So much has been said about 'external assistance' or 'educational assistance,' that it is interesting to think of 'external assistance' between developed and developing nations as constituting the building blocks of international trade in education. In reality, it is only a small portion of the whole process (though a highly strategic one). The major portion of the world's entire educational process takes place among industrialised nations, with the women sector as a minority¹⁴ coming under 'official' programmes or on a bilateral basis (Coombs 1986:120). The evaluation of development assistance became increasingly important during the early 1980's for several, and very often, contradictory- reasons (Berlage and Stokke 1993).

However, available evidence suggests that the grantees of programmes sponsored by government and major private organisations are more likely candidates for the 'brain drain' (Coombs 1986:121). This is because grantees are more exposed to new technologies that gives them better pay in other countries. Generally, there are differences in the pay between those persons with higher degree and those with or without higher degree, even if they are

¹⁴ An evidence of gender bias.

doing the same job (Harris and Jarrett 1990:14). This relates to the issue of education as a screening device (Woodhall 1973; Psacharapoulos 1987; Cohn and Geske 1990); that is, education enables employers to identify individuals who have superior natural ability or attitudes or personal qualities that make them more efficient or productive.

Such perception is associated with another perception. The perception that the public sector is generally the main employer of educational aid grantees in many developing countries, and that salaries paid are either artificially high or low and bear little relation to productivity (Coombs 1986). Harris and Jarrett (1990) argue that in such cases, those who acquired higher educational qualifications were already in possession of most of their productive capacities before their education; that education may do relatively little to enhance productivity. With this, Harris and Jarrett (1990:15) suggested two questions that need to be addressed in the evaluation of educational programmes: (1) Are the educated more productive as a result of their education? and (2) Do earnings reflect productivity or are earnings determined by other factors?

Such ideas are presented in the work of Little (1984) and Psacharapoulos (1988). However, another important issue in the effectiveness of educational assistance is on the appropriateness of technology. There has been a considerable outpouring of literature since the appropriate technology notion of Schumacher (1973) emerged. He wrote critically on the inappropriateness of the transfer of modern, industrial technology of the developed countries to solve the predominant problems of developing countries, namely poverty (especially rural poverty), and advocated instead the choice of technologies more appropriate to the needs and resources of the Third World.

With this, Coombs argued also that efficiently delivered educational outputs or services which do not meet the needs of the student and his society make for an ineffective education and hence, is a poor investment (Coombs 1986:128).

Given this literature on the characteristics of effective educational assistance in the form of its outputs, most observers would agree that there is a far more important benefit than those discussed, that is, to be able to keep the channels for intellectual and cultural discourse open. From these discussed characteristics of effective educational assistance, a Theoretical Framework that can be used in the evaluation or analysis of an educational assistance programme shall be discussed.

A Theoretical Framework

The earlier history of today's industrialised nations sheds light on certain of the problems and prospects of today's developing countries. This does not mean, of course, that the latter countries should follow precisely the same path, or take as long to travel it. But there are certain inescapable developments that must be gone through, whatever a particular country's philosophy, as it moves from a relatively low state of economic development to a more balanced industrial economy.

One of these processes is the gradual change in the composition of its labour force. Starting with a large component of unskilled labour and a very small component of skilled and high-level humanpower, the profile of the labour force progressively alters as it comes to consist less and less of unskilled workers and more and more of skilled and high-level humanpower. To put the same thing differently, a developing economy gradually moves from being a low-wage, low-productivity, labour-intensive economy, toward being a higher

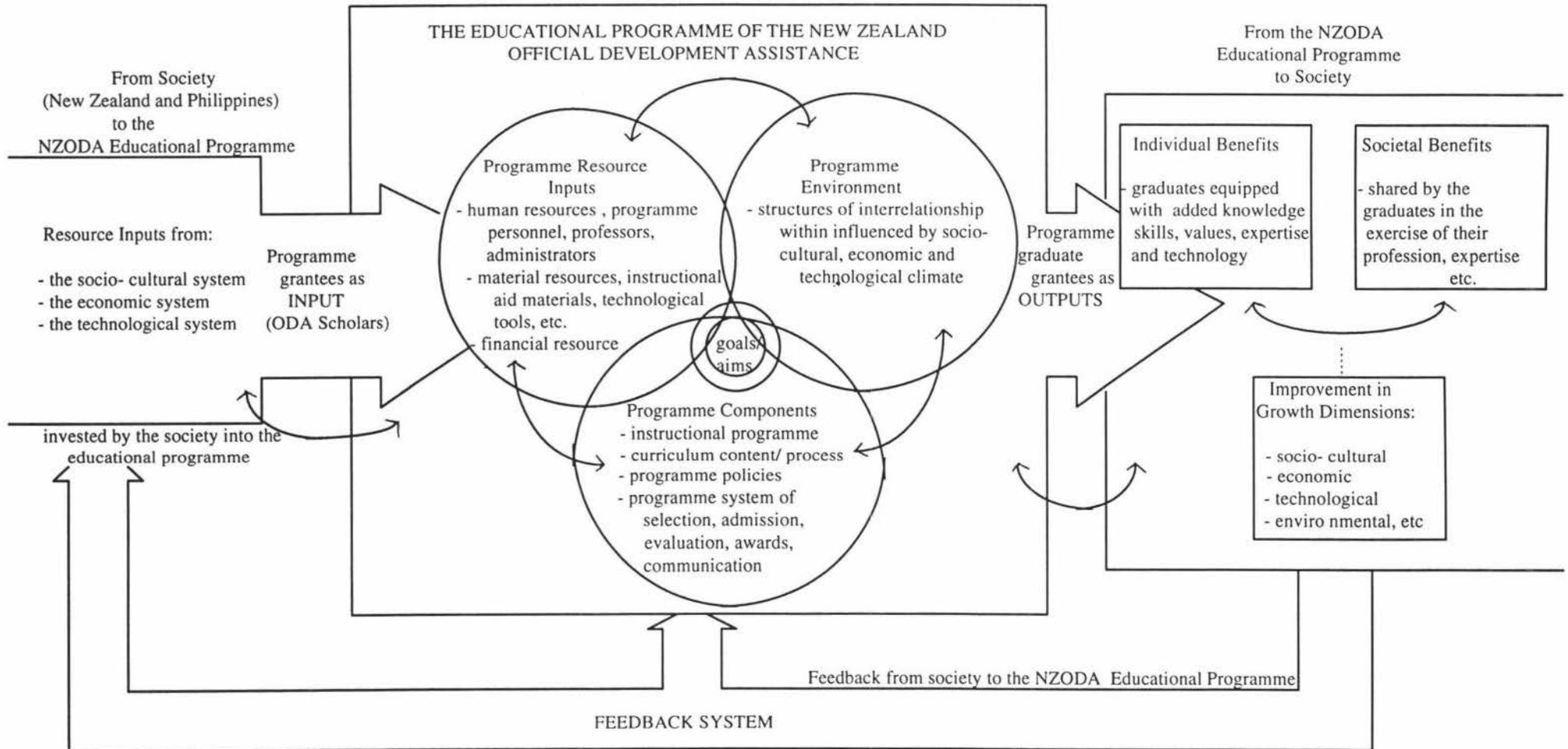
productivity, higher wage, capital-intensive, labour-saving economy. In this process, education and training play a major role. Moreover, educational aid programmes are part of the process.

A method which can be used for examining educational aid programmes is the 'human capital' approach (see discussion on Human Approach in this Chapter). This study focuses on how the educated and trained grantees, after finishing their studies, will help the different institutions in the Philippines to attain its development objectives. Graduate grantees could help through more competent work, higher productivity, use of new technologies or ideas, and the acquisition of new perspectives in their work.

A flow model (see Figure 2.2) based on the previous discussion of the education and training under the educational aid programme is designed to illustrate the goals and objectives of the New Zealand Official Development Assistance (NZODA) Education and Training Programme. The model measures the extent or degree to which these needs are being met as defined by the programme's goals and objectives. The relationship between inputs or resources and outputs (benefits, effectiveness) is embodied in the value model which provides a method of evaluating the programme. The value model was used to measure the relative worth of alternatives by taking into account their benefits and their timeliness. These measures of effectiveness serve as standards of achievements against which the results of each course of action can be compared.

Coombs (1970:12) defined effectiveness of educational programme in terms of productivity, which he further identify as "the relationship between the cumulative benefits over time (as distinct from the immediate output which is to graduate or to have degree) and the original educational inputs that made

Figure 2.1
 FLOW MODEL OF EDUCATION IN THE
 NEW ZEALAND OFFICIAL DEVELOPMENT ASSISTANCE



these benefits possible.” Coombs also holds the opinion that these ultimate benefits accruing to the learners and to society from previous educational inputs or investments “are less precisely measurable than the immediate learning ‘outputs’ which students carry away with them from the programme on the day they leave it” (Coombs 1985: 126). This may, however, be contested in the light of other views which hold that the indicators of outcomes and effectiveness which represent the educational benefits required by the individual learner and his society from an educational programme are more easily identified compared to apparent gains exhibited by the learner upon departure from the educational programme.

Thus, applying the concept to this study, ‘effectiveness’ measures the private and societal returns of education. It measures the extent to which the benefits or ‘added value’ acquired through the educational process have been utilized by the learner in the course of time, to ensure his personal growth and to improve the quality of his life and that of his community. These educational benefits which come by way of added knowledge, values and skills acquired by the educated individual and exercised in his community actualises his personal, social, economic, cultural and technological competencies and likewise, promotes the growth and progress of his society. Furthermore, these returns of educational investments may be ploughed back as positive contributions to the social, cultural, economic, and technological subsystems of the society. In this sense, educational aid programmes can be viewed as useful agents for societal change and development. Effectiveness and outcomes are the acid test of the educational aid programme’s success or failure for it shows “the effective utilisation and ultimate functionality of the programme”, which is the ultimate justification for a programme’s existence or non-existence.

In the analysis of benefits of an educational aid programme, the many factors inside and outside the educational system which influence educational productivity are considered. Some of these factors are: the relevance of educational aid programmes's goals and objectives to societal (Philippines) needs and resources, the capacity of the economic system to absorb the skills developed by the educational aid programme, and the abilities and motivations of learners who enter the programme. Hence, in the analysis of the effectiveness and outcomes of the educational aid programme, these factors were looked into. Their intricate linkages and interdependencies were examined; and it was determined as to what extent they are effectively interacting so that when combined with the benefits gained from exposure to the educational process they lead to the increase in the effectiveness of the educational aid programme.

Effectiveness was further demonstrated by identified advantages resulting from the learner's use and application of knowledge, values and skills gained from the educational services availed by the educational aid programme. These advantages or benefits served as concrete indicators of the educational aid programme's level of effectivity in the individual learner as well as at his office of work and in society at large.

The evaluation of the effectiveness of the educational aid programme in this thesis followed the following steps: first, the analysis of the programme goals' functional relevance to societal (Philippines) needs and the programme's capacity to fulfill these needs within its available resources; second, the identification of the factors which influence society's (Philippines and New Zealand) inputs and expectations or demands from the educational aid programme and its environs; and third, a description of the quality or competencies of the programme's target clientele (Recipient) and analysis of the

various motivations which prompt them to accept the educational programme. In the analysis of the effectiveness of the programme, the learner factor is crucial (Coombs 1986). This is so because the motivations, abilities and needs of the learner can significantly influence the degree of learning acquired from available educational services. Similarly, a learner's needs, motivations and abilities also dictate to what extent learnings derived from an educational experience will be utilised for personal and societal gains.

Finally, the ensuing cumulative benefits derived, in time, by the educated individual, his office of work and his society within the social, economic, cultural and technological dimensions of life are identified and assessed against the original or initial status or quality of the learner, his office of work and his society prior to the influence of the educational aid programme. To measure the benefits, the steps in Table 2,1 were applied.

To measure the private (individual) and social (societal) benefits, possible criteria and indicators of benefits that can be measured were identified. These indicators are related to the knowledge, skills, values and productivity accrued to the graduate and the society as expected outcomes of the programme. Moreover, programme components which includes the aims, goals/objectives, inputs and process of inputs or resource mix were also looked into. This evaluates the programme based on the general objectives of the educational aid programme. Given the benefits derived by the society and the individual, and the outputs of the goals and objectives, conclusions and recommendations which can serve as feedback to the educational aid programme will be drawn.

Table 2.1
Measurement of private and social benefit

Beneficiary	Individual	Societal
Objective	to assess the individual benefits	to assess the benefits accruing to the community served by the graduates as a result of their exposure to the educational aid programme
Step 1	Identify criteria whereby the individual benefits derived by the graduate can be evaluated, as well as the indicators under each criterion (as related to knowledge, skills, values and productivity which are expected outcomes of the programme)	Identify the societal benefits accruing to the society/ community/work-office served by the graduates maybe evaluated
Step 2	to examine the programme components, that is, its aims, goals/objectives, inputs and the process of inputs and resource mix	
Step 3	to relate the benefits derived to programme components in order to establish the extent of congruence between them	relate benefits accruing to the community, through the programme's graduates, to the programme components in order to establish the extent of congruence between them
Step 4	Draw conclusions and recommendations which can serve as feedback to the educational aid programme	

Note: Table adopted from Zwanaepoel 1986:90-101.

The effectiveness of an educational aid programme, can directly, through both the quality of feedback on the performance of its educated outputs and the evidence of the benefits derived, serve to influence its efficiency by being an additional input into the educational aid programme. This feedback received by the programme from the society and the recipient in the form of the graduate grantees can help improve (if heeded and allowed to influence programme decisions) or restrict (if programme closes itself to feedback from society) the internal efficiency of the programme.

The resulting benefits are the ultimate consequences or benefits, economic and non-economic, which eventually accrue to the student, his family, his work-office and his society as a result of his learning experience or education. These observable results or consequences of learning provide the acid test of how worthwhile the education has been. Has the educational experience made the student a more skillful worker, a better leader, a more successful earner, a fuller person? Is his/her family, his/her community, his/her total society subsequently enjoying the benefits of his/her educational success and progress?

PART II

CONTEXT

Part II provides the background to the Philippines and New Zealand as partners in development. It presents Official Development Assistance (ODA) as a type of aid to the Philippines and identifies its role in the New Zealand - Republic of the Philippines relationship, particularly in education and training development. Part II is divided into two Chapters. Chapter Three provides the background to the Philippine's development through education and the role of aid in this development, while Chapter Four presents New Zealand - Philippines partnership for development, specifically in education and training. This review and presentation of the New Zealand - Philippines partnership for development will be used in the analysis of the outcomes and the effectiveness of the New Zealand Official Development Assistance (ODA) Education and Training Programme to the Philippines.

CHAPTER THREE

THE PHILIPPINE DEVELOPMENT

Introduction

This chapter starts with background information about the Philippines, its problems and development. The chapter presents Philippine development in general and the importance of education in that development. Specifically, it discusses educational aid to the Philippines. More specifically, it presents the ODA form of aid to Philippine's education and training programmes.

The Philippines

The Philippine's archipelago⁵ comprises 7,107 islands, making internal communication and transportation difficult and expensive. Although English is the official language¹⁵, it also has a national Language; Filipino, derived mostly from Tagalog. However, aside from its national language, there are about 102 local languages and dialects spoken. This may well be attributed to the large number of islands. Further, the country is divided into 77 provinces, with 68 cities, 1,541 municipalities and 41,924 barangays.

The economy is basically light industry and agriculture, the country's chief products being rice, corn, coconut, pineapple and sugar. The country is rich in copper, cobalt, nickel, silver, iron and gold. Furthermore, the Philippines has well-developed industries in food processing, textiles, clothing, wood, forest products, and home appliances, with fast-growing aquaculture, microcircuit, garments and furniture sectors.

¹⁵ English is used in official and business transactions, and as medium of instruction in the Philippines.

Following the recession of 1984-1985, the Philippine economy grew at an average rate of 5.0% per annum during 1990-91, but improved significantly afterwards. For the first quarter of 1995, the economy grew at 5.2% in real terms and 7.10% at the last quarter of 1996. This was fueled by high levels of investments, improved export earnings, sustained consumer confidence and recovery in the industrial sector. However, the agricultural sector together with forestry and fishing also played an important role in the economy, employing about 45% of the work force and providing almost 30% of GDP.

Although Philippine economy is progressing, it still has a large population, with high levels of poverty, widespread unemployment and underemployment, a large government deficit, low levels of savings and investment, a massive debt (\$28.9 billion in 1991)¹⁶ and an industrial sector that is concentrated in the urban areas, specially in Manila (the largest and capital city). In addition, there exists significant rural and urban growth disparities, insufficient domestic resource mobilisation, and inadequate infrastructure and electrical power.

In 1995, the Philippine population grew to 67.8 million¹⁷ from 48.1 in 1980 (New Internationalist, 1993- 1994; IBON 1993; NCSO 1995). Only 67% of the entire population has access to adequate sanitation, and about 58% still live in the rural areas. Many of these rural areas are not equipped with such basic amenities as electricity and running water¹⁸.

The adult population literacy rate is very high, around 90% (NI, 1993-1994; IBON 1993). Nevertheless, the Department of Education, Culture and Sports

¹⁶ All dollars quoted in this study are in US dollars unless otherwise stated.

¹⁷ Philippine GNP had an annual growth rate of 2.3%.

¹⁸ Of the total Philippine population, only 52% have access to water (NI 1993-94 p. 483; data for 1985- 88).

(DECS) in the Philippines has said that the country's education system remains ineffective.

A study in 1987 conducted by the Department of Education, Culture and Sports (DECS 1988) in the Philippines shows that 1.5 million Filipino children are out of the formal education system; 11,600 barangays do not have any elementary schools; and 35% of the existing 34,000 school buildings are inadequate. For secondary education, 61 of the total 1,800 municipalities have neither public nor private schools. Furthermore, one out of every three grade one pupils will not reach grade six (DECS 1988). Students who fail to continue their education after dropping out before grade four revert to illiteracy within a couple of years.

Further to this, tertiary education generally has a vocational orientation, the aim of which is to equip students with skills they need for entry into the labour market. There are two tracks in the tertiary systems-degree and non-degree-with the bulk of enrollments in the first track. The educational institutions in the Philippines providing tertiary education are predominantly private which may account for this general orientation. State colleges and universities account for only about 10% of the total college population.

Since the mid-80's, schools in the Philippines have felt the shortage of qualified teachers, professors, and instructors especially in the areas of science, mathematics, technology, and work education (Muhi 1986:179); all vital areas for the development of a country like the Philippines. The country has a system of tertiary education where most of the professors do not have graduate degrees. The impediment for teachers and instructors to pursue their graduate courses is quite obvious. Teachers know that even with a master's degree, they

will continue to receive low salaries. There is therefore no incentive for further study.

The least developed stage of the Philippine's educational system is the graduate stage for training future faculty members of colleges and universities (Muhi 1986:179), and for meeting the manpower needs of the future of the country. Given the problems in the Philippine education, it is important to note here that the demand for schooling services in the Philippines does not depend on the size of the school age population, but on the income and education of parents and on the health status of the child (Muhi 1986:113). The supply of educational services is determined by the nation's capacity to save and invest in educational services both for expansion and for quality improvements. Both supply and demand factors determine the educational level of the population. Given this, it is apparent that much still needs to be done to achieve a relevant and effective education system in the Philippines.

Philippine Development Through Education: Experiences, Thrusts and Perspectives

As early as 1960, about 90% of the primary school-age population was enrolled in some form of education, and coverage in this population has continued to improve over time. In secondary education, the enrollment ratio rose from 27% in 1960 to 78% in 1990, while in higher education, it rose from 13% in 1960 to 42% in 1990 (see Table 3.1). These improvements in the enrollment ratio indicate that the education system has been expanding at a significantly faster rate than the rate of the population growth.

The Philippine enrollment ratios at all levels exceed that for most other Developing Countries, as shown in Table 3.2. The difference is widest in

secondary and higher education. In fact, the Philippine's system had more extensive coverage in 1960 than the average Developing Country's coverage in 1980. By the late 1980's the educational pyramid in the Philippines was comparable to that of most other Developed Countries.

Table 3.1
Gross enrollment ratios in the Philippines, 1960-1990

Year	Primary	Secondary	Higher
1960	92	27	13
1970	108	46	20
1980	113	65	26
1985	94	65	38
1990	115	78	42

Sources: Government of the Philippines (1965) for 1960; UNESCO (1970, 1980) for 1970 and 1980; Government of Philippines (1985) for 1985 and NSO (1995).

Given that the education system in the Philippines is so well developed, how do the returns to education compare with those in other countries? More importantly, what has been the relationship of education to Philippine's development?

Table 3.2
Enrollment ratios by level of education

Country	Primary	Secondary	Higher
Philippines	115	78	42
Anglophone Africa	77	17	1.2
Francophone Africa	46	14	2.4
South Asia	71	19	4.4
East Asia and Pacific	87	43	9.1
Latin America	90	44	12.0
Middle East and North Africa	82	36	9.4
Developing countries	75	23	6.9
Developed countries	100	80	21.0

Sources: For the Philippines see Table 1; for other regions, data are from World Bank (1986).

Since it is hard to achieve precision in quantifying the effect of education on lifetime earnings one can only present the magnitude rather than the exactitude of the economic contribution of education. The study made by Denison (1962:35) shows that Philippine education contributes 23% to economic growth. Using Denison's method, Williamson and De Voretz (1969:13) in their study of economic growth of the Philippines arrived at the conclusion that "25% of the growth in output per employed member of the labour force is explained by investment in education." Williamson and De Voretz (1969:13), results show that in 1966 the social returns to primary, secondary and higher education were 8, 21 and 11% respectively. The estimate for higher education is corroborated by Miao's (1971) study. However, an International Labour Organisation (ILO, 1974) study noted that the returns are probably over estimated because of inappropriate assumptions about the distribution of public spending among the three levels of education. The ILO estimated (ILO 1974:634) that the social returns to education in the Philippines are considerably lower than those for other Developing Countries, as indicated in Table 3.3. The result is related to the high enrollment ratios in the Philippines. The data in Table 3.3 implies that unlike the average Developing Country, there maybe a relative scarcity of physical rather than human capital in the country.

Table 3.3
Social rates of return to education in the Philippines
and other world regions

Region/Country	Average Enrollment ratio (%)	Social rates of return to education			
		Primary	Secondary	Higher	Average
Philippines(1971)	69	7.5	6.5	8.5	8
Africa	31	26	17	13	19
Asia	43	27	15	13	18
Latin America	53	26	18	16	20
Developed countries	70	13	10.5	8.5	11

Source: J.P.Tan and V.B. Paqueo, International Journal of Comparative education, 1993.

On the other hand, private rate of returns to Philippine education shows that there is relatively little public subsidisation at all levels of education (see Table 3.4). In many developing countries, the heavy subsidisation of education stems primarily from political pressures. A result that is reinforced by the belief that without subsidies people will underinvest in education. Thus, the Philippines evidence challenges that view, suggesting that greater reliance on private education does not necessarily retard educational expansion¹⁹.

Table 3.4
Private rates of return to education in the Philippines
and other world regions

Region/Country subsidisation*	Private rates of return			Index of public		
	Primary	Secondary	Higher	Primary	Secondary	Higher
Philippines(1971)	8	* 6.5	9.5	7	0	12
Africa	45	26	32	92	51	157
Asia	31	15	18	58	13	9
Latin America	32	23	23	104	47	50
Developed countries	17	12.5	12.5	51	14	26

Source: J.P.Tan and V.B. Paqueo, International Journal of Comparative education, 1993.

Note : * defined as percent by which the private rate exceeds the social rate.

Other studies on the private rate of return for education are found in Dumlao and Arcelo (1979), Laya (1987), Paqueo (1985) and J.P.Tan and Paqueo (1993). Using the Mincerian function,²⁰ Tan and Paqueo (1993) show that an additional year of schooling, at the sample mean, yields a private return of 8.1%, corroborating the Paqueo (1986) estimate. This mean that expanding

¹⁹ When there is very low or without subsidies people will underinvest in education (Psacharapolous 1986).

²⁰ The Mincerian function expresses the estimated link between an individual's income and his schooling and experience. The coefficient on the schooling variable maybe interpreted as reflecting the average rate of return to schooling in the sample population.

investment in education may not be as economically profitable in the Philippines as in other countries. Tan and Paqueo (1993), using several different methods, including the age-earning function, also concluded that the profitability of educational investments has not diminished with the expansion of the system. As Psacharopoulos (1986) and Tan (1993) have noted, the explanation may be found in Tinbergen's (1975) observation that technological advances increase the demand for educated manpower so that educational investments remain profitable even with a rapid rise in the supply of educated labour.

Updated estimates for 1993 in the Tan and Paqueo (1993) show, that despite rapid expansion of education in the 70s, 80s and 90s, the rates of returns to education have not declined, although lower than those of other developing countries. In Asia private rate of return is highest in Malaysia and lowest in Thailand, while social rate of return is lowest in the Philippines (8.5%) and highest in Thailand (18.4%).

The literature (Muhi et al 1986; Sutaria, et al 1989) further shows that the Philippines' experiences in development and education since its independence from its colonisers can be summarised thus.

1. The country's uneven economic growth has created educational disparities. Urban areas have greater access to educational opportunities and a better standard of education.
2. Rapid educational expansion occurred even during times of little industrialisation. This placed pressure on the economy for funding educational expansion.
3. There has been an imbalance of investment in different levels of education. The percentage distribution across the three levels is quite disproportionate.

The result has been an uneven quality of education across educational levels and geographical regions in the Philippines. The private education sector responded to high growth in enrollment by offering education of a standard commensurate to the paying capacity of the client. As a result, quality has suffered. Today, the Philippines educational system shows at all levels a great deal of disparity in quality.

Perhaps the phenomena is heightened by the Philippine school system, which in many instances has provided irrelevant education for Philippine's development needs (Quisumbing 1986). The rapid development of new knowledge in all fields has left the education system so unprepared that large scale and specialised in-service training and upgrading are needed. Demand for high level, specialised humanpower (professionals and technicians) could not be met. The lack of facilities for training such humanpower in the region, led to the common practice of sending graduate students abroad for training, later to lose many of them to attractive job offers in Western countries where they received their training (Quisumbing 1986:78). Education abroad, produced a large group of graduates trained for white collar jobs. Since the level of the Philippine economic development was such that it could not absorb them, it then created a class of the "educated unemployed". Relative to this problem is the Filipinos perception of education as a way out of poverty. Perhaps this perception could have also heightened the above situations. Filipinos would, for instance, readily associate educational attainment with individual income. This further explains the commitment of scarce resources by both government and households to education related programs and for the schooling of children at all levels. For many Filipino graduates and other school dropouts, however, it has become more difficult to land jobs which match their backgrounds. Moreover, the net returns to education, after considering schooling costs and foregone earnings, appear to be lower than the returns to other investment

opportunities. Thus, among those who have pinned their hopes on education, many end up disillusioned.

On the issue of employment and unemployment, the Philippine labour force makes up of 42% (27.5 million) of the total population of 65 million as of the last quarter of 1995. This is 64.4% of the working-age population which is 42.7 million. Since the National Statistics Office (NSO 1996:29) in the Philippines puts the working-age at 15, more than one third (35.6%) of the working-age population is excluded from the labour force. Of this labour force, more than 60% are in the urban areas. In 1971-1977, there was an increase in the employment rate of 94.1%, but the employment rate still fell short of the target. This was due to the increased lay-offs, retrenchments and shut downs as a result of adverse economic conditions (Sutaria et al. 1987:34). Manila, the National Capital Region of Philippines experienced a low employment rate from 1976-1982. Underemployment on the other hand declined from 25.5% in 1976 to 17.4% in 1977 but increased from 19.8% in 1978 to 29% in 1982. This was brought about by mismatches in skills with the available job opportunities and worsening economic conditions. The aggregate employment rate increased from 95.7% in 1980 to 95.8% in the fourth quarter of 1983. What happened during the period 1979-1982 was that the employment did not keep pace with the rate of expansion of the labour force, hence the employment rate declined. This was augmented by the world recession which slacked the growth of the economy (Fookien Times, 1982-1983:14). With this, it is worth noting that only about 74% of the 1984 graduates are employed (Quisumbing 1986:38). In view of this, a number of changes have been introduced to the Philippine educational system to make it more responsive to community needs; and to maximize its contribution to attain its national recovery goals.

The Philippines, since 1993 has embarked on improved quality of life for every Filipino through people empowerment²¹. This is the ultimate goal of the Medium-Term Development Plan (MTDP) for 1993-1998 which defines the economic framework of the country. The goal is anchored on human development and international competitiveness. Investment in human capital will be reinforced through education, training, availability of basic health services and accessibility to productive resources. International competitiveness involves the ability of the country to produce high quality products and services acceptable to world standards through the provision of proper incentives and infrastructure support. The Plan has adopted the twin-themes of “Global Excellence” and “People Empowerment.”

The goals and strategies of the Plan will pursue the development of the agricultural sector, the backbone of the country’s economy. That will also be intensified through the speedy implementation of the agrarian reform program, provision of adequate infrastructure facilities and institutional support, and the adoption of location-specific and ecosystem-based approaches to agri-industrial development in the identified growth areas. The development of these growth areas or the Regional Industrial Centers (RICs) is being pursued as the major industrialisation strategy.

In view of this then, the thrust of Philippine education is to provide relevant quality education that will teach the Filipino people not only basic literacy and employable skills but how to be productive citizens of the society. The Philippines believe that the true test of quality is the degree to which one can share what one has learned with others, and the degree to which one can improve the quality of life of ones community and people.

²¹ Medium Term Development Plan (MTDP) for 1993-1998.

The Philippine's education system thrust is 'excellence'. Excellence has been defined as performing in the boundary of individual ability in ways that test and stretch personal limits both in school and in the place of work. It does not refer to mere attainment of minimum learning competencies prescribed for a certain level. It suggests achieving above and beyond minimum learning levels. It means achieving according to one's potential at optimal levels.

The search for excellence is on-going the world over, and while there seems to be a universal awareness of what is referred to as "excellence". This is due to the seemingly great evidence showing that excellence in the developed countries has been attained through "quality" education which was pursued with the development of technologies. All these existing relationships seem to have contributed to the national development of the affluent societies concerned.

The future of any country seems to be in technology, and development of the same is preceded by quality education. In technological societies, it is even alleged that unemployment is not, so much due to lack of jobs as it is the result of inadequate education. In view of this, and as discussed in Chapters One and Two, education is deemed to play an important role in the development of a nation. Therefore, Developing Countries are heavily reliant on the transfer of technology through education, and specially of that from the Developed Countries. Educational aid is an important source of this training.

Aid and the Philippines

Developing countries seek assistance according to their social and economic structures, stages of development, climate, customs, and other characteristics. Their needs can be broadly divided into improvement of economic and social

infrastructure, and development of the human resources necessary for national development. These fields interact with each other, and together they contribute to the social economic development of the countries concerned. The Philippines, for example, seeks foreign assistance to help in its development goals.

The total volume of US\$6,824.3 million was injected into the Philippine economy from external sources in 1989-1993 represents added inputs of capital goods and services which help in development efforts toward generating local energy, the expansion and improvement of transport and communication services throughout the country, and the implementation of integrated rural development programs through training in agricultural technology, forestry and fisheries (OECD 1989-1993:159).

Of the total volume of foreign assistance flowing into the country's economy, 91% is in the form of capital goods and services and the remaining 9% is in the form of technical assistance. In 1990 alone, Philippines received a total of \$1277 million foreign aid. Although the Philippines receives so much aid²², its external debt still amounted to \$28.9 billion in 1991.

In spite of the big difference in the volume of aid being received and the external debt of the country, sectoral distribution of the aid remains an important factor. Sectoral distribution of external assistance or aid according to volume allocations reflects the development priorities and programs considered by the Philippine government. The first three of which are: natural resources development, transport and communication, and agriculture, forestry and fisheries.

²² Philippines is the sixth highest recipient of aid in 1990 (NI 1993-94).

Education, although seemingly one of the sectors with the lowest budget allocation, nevertheless benefits from every project undertaken by each of the other sectors. This stems from the fact that education is an essential component of every development effort. This educative component is ensured by the technical assistance dimension included in every project. This technical type of assistance is classified into the following:

1. training programmes which include non-formal modes of delivering education and training; formal degree courses for undergraduate and post-graduate levels, and specially organised seminars and conferences for specific fields and needs
2. humanpower assistance which include the service of foreign experts, consultants and advisers to conduct training programs and development feasibility studies, guest lecturers and speakers invited to talk on their specialties, and volunteer groups or individuals to live and work with the recipient country
3. material or commodity assistance which include equipment, machineries, supplies, buildings and facilities, books, food grains, fertilisers, medicines, population control devices and drugs.

Education, therefore, plays an all-pervasive role, ensuring the directions of growth and change in the accompanying transformation of people's values, attitudes and behaviour. It also enables people to better utilise and enjoy the benefits of increased production and enhances their capacity to decide on matters that affect their lives.

Further, it is only in education or the educative component of aid where the effects of external assistance can be gleaned, although most technical assistance is spent on foreign consultants. This is the finding of Sr. Mallillin, SPC (1981) in her study of external assistance to the Philippines. However, according to Sr. Mallillin (1981), there is a problem on the possible mis-match between the type of training given by foreign donors and the specific manpower needs of the

Philippines. She explained that the training of Filipinos after foreign models, utilising tools of development quite alien and most probably inapplicable to Philippine situation, more often than not impeded rather than promoted indigenous development. Further, the principal shortcoming of foreign based training arises from the short duration of training for individual participants that ranges from two to three months to a year. This could be due to the very little time provided for effective training in a foreign setting. The situation, rather than augmenting and strengthening the country's manpower resources after their foreign based training leads the trainees to join the foreign work force where their new skills are better applicable, better appreciated and better compensated. Even if they do come back to serve in their country in exchange for their foreign training, as provided for in their contracts, they are likely to go abroad again after serving their time in the Philippines. Thus, a 'brain drain' can occur if the country is unable to effectively employ its highly skilled manpower resources due to economic constraints.

Such problems are now being considered by donor agencies, specially those countries who are members of the Organisation of Economic Cooperation Development (OECD). OECD members usually provide technical assistance through its Official Development Assistance (ODA)²³ arm.

Official Development Assistance as a Type of Aid in the Philippine's Development

Origin of ODA to the Philippines, 1978-1995

From 1978 to 1982, ODA flows to the Philippines (on a commitment basis) averaged about \$1 billion annually, of which approximately 90% was in the form of loans and 10% in grants.

²³ ODA is far more concessional than other forms of foreign assistance.

ODA to the Philippines originated mostly from two multilateral (IBRD and ADB) and three bilateral (Japan, U.S.A. and Federal Republic of Germany) sources. Altogether, they account for more than 90% of total ODA loans to the country during the five year plan period. Among them, the biggest source of ODA loans was from the World Bank Group (IBRD including IDA), where slightly more than half of the total originated. Following next is ADB which supplied almost one fifth (19.6%) of total ODA. Among the bilateral donors, Japan was the single biggest source, accounting for 19% of the total, followed by the United States (4.1%) and the Federal Republic of Germany (1.6%).

With respect to ODA grants, the single biggest source was the United States which provided 43% of the total, followed by Japan (18.3%) and the U.N. System including the United Nations Development Programme (17.6%). The bulk of the remainder was provided by Australia, the Federal Republic of Germany and New Zealand, among the bilaterals, and the European Union (EU) which is classified as a multilateral source.

Official Development Assistance to Philippine's Education System

ODA is important in any developing country because it is one of the sources of development financing. As such, it is a vital development input. As a source of development financing, ODA is used to finance a developing country's investment and technical assistance requirements.

ODA, in terms of its purpose are classified into capital or technical assistance. Foreign assistance is an important development input in the Philippines because domestic capital is inadequate. While labour is generally abundant, highly skilled labour (or technical expertise and experience in certain fields) is also still inadequate, so that foreign technical assistance is also equally important.

ODA is a means of providing technical assistance in institution building, i.e. strengthening the capacity of institutions in delivering certain governmental services. ODA grants from UNDP and other UN agencies are essentially used for this purpose. Inputs provided usually take the form of expert services, training, and a limited set of commodities/equipment for training and for the use of paying experts/consultants for rendering their services.

If the history of the Philippines were re-written today, one phenomenon that would merit coverage is educational cooperation and assistance programmes under the ODA. One type of educational assistance programme the country enjoys provides training grants, scholarships and fellowships for deserving personnel. More than a thousand individuals in the government and private sectors have benefited from this type of programme. A few hundred of them have organised themselves into the Philippine Association of Technical Assistance Participants (PATAP) and have collectively addressed the problem of how to multiply the effects of their technical training and maximise their contribution to national development.

Perennially operating on a striped budget, the Philippine education system has been receptive to offers of educational assistance. However, although the common practice is to send graduate students overseas for training, the result is often lost to the Philippines (Quisumbing 1986; former Secretary of the Department of Education, Culture and Sports in the Philippines). Many of them do not return due to the attractive job offers in Western countries, usually where they received their training.

The literature on the effects of ODA projects and programs in the Philippines is very sparse. Studies on ODA to the Philippines were concerned with its impact

on economic development such as those by Jurado (1983) and Bulan (1973), with analysing its terms and conditions (Magno 1976), and with inputting foreign assistance variables into macro forecasting models of the Philippine economy (Mangahas 1969). Other studies include a comparative analysis of the institutional/administrative arrangement for planning and execution of ODA from USAID and UNDP by Reyes (1980). A study worth of note here, is the study done by Sr. Mallillin, SPC, in 1981, which was withheld for public reading for more than a year. The study determined the sources and flows of educational assistance to the Philippines. Results show that educational aid was not properly utilised in the Philippines. For this reason, this thesis is taking New Zealand educational assistance to the Philippines as its case study. New Zealand is chosen in this study for the reason that Philippines believe that educational assistance, specifically training and education from New Zealand is effective (NEDA 1987).

CHAPTER FOUR

NEW ZEALAND AND THE PHILIPPINES: PARTNERS IN DEVELOPMENT

Introduction

This chapter provides an overview of the relationship between New Zealand and the Republic of the Philippines with regards to development. The chapter starts by highlighting New Zealand's development co-operation including the volume and priorities of assistance. This is followed by a discussion of New Zealand and the Philippines as development partners; the latter being the recipient and the former being the donor. Specifically, the last section of the chapter presents the New Zealand Official Development Assistance Programme in Education and Training in the Philippines. It presents a background on the roles of New Zealand and Philippines in the NZODA to Education and Training.

The New Zealand Development Cooperation Programme

The New Zealand Official Development Assistance (NZODA) is a semi-autonomous government agency that is directed to implement New Zealand's official aid programme. It is managed by the Development Co-operation Division of the Ministry of Foreign Affairs and Trade together with New Zealand diplomatic overseas posts.

NZODA follows a set of six Guiding Principles²⁴ which reflect the evolution of the Government's aid policy and philosophy into the mid 1990s (See Appendix B). The statement of guiding principles is supported by policy statements on Development, Environmental Protection/ Rehabilitation, Women in Development, Education/Training and Human Resource Development and Private Sector Development in the South Pacific.

The NZODA philosophy is one of cooperation and partnership between governments, people and organisations. Development is seen as people-centered; as a process of enlarging people's choices, and helping provide opportunities for people to take control of their lives and therefore to realise their potential. As stated in NZODA Programme Profile (MFAT 1996-1997), its principal purpose is to achieve lasting improvements in living conditions of present and future generations of people in developing countries, specially the poor. This is why NZODA places great emphasis on human resources development, with the hope that trained people will and can add value to their countries' efforts to promote economic and social progress.

NZODA is an important part of New Zealand's external relations. It helps to advance international economic prosperity, maintain peace, security and stability, and protect the global environment. Moreover, the NZODA programme is an important means of demonstrating New Zealand's willingness to assist with the development needs of other countries. For reasons of mutual benefit, New Zealand wants to see economic growth in developing countries effect on increase in conditions of living and levels of trade and investment.

²⁴ In the year 1996-1997, NZODA Guiding Principles were reduced to six from nine in the last five years.

To address these broad objectives effectively and appropriately within an ever changing policy on international cooperation, new initiatives are required from time to time. This is why projects and programmes keep on changing. In 1994 for example, cooperation with, and involvement of, the New Zealand private sector in NZODA was increased; further initiatives systems development in education and training and in health programmes followed; and the focus on gender and environmental issues were increased.

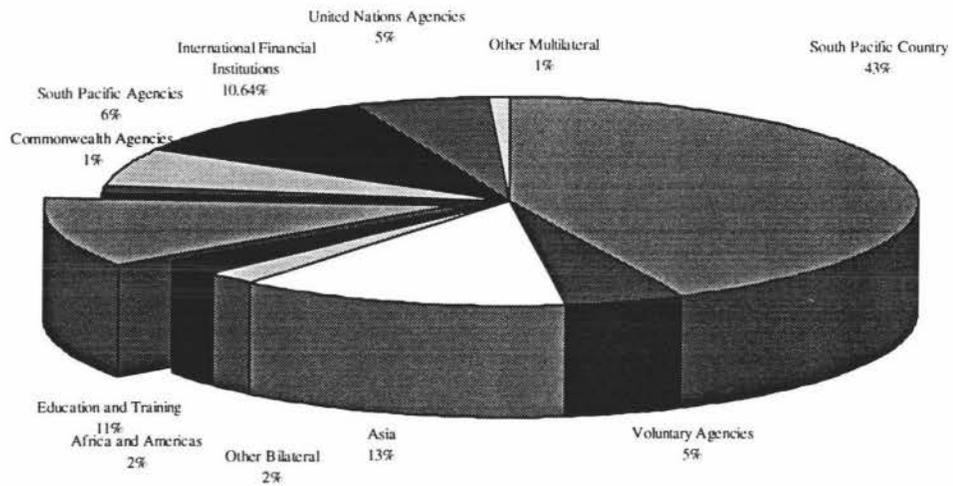
In Education and Training, the Aotearoa Scholarship Scheme and the Post Graduate Scholarship Schemes were established in 1994 and commenced in 1995. Further, a computerised programme information system (DAN and SID) was developed for better exchange of information. As the NZODA programmes continually change, its ODA composition also changes.

Aid Composition and Funding Scheme

New Zealand educational aid is provided on a one hundred percent grant basis. And of this, seventy six percent (NZ\$ 125.758 million) of NZODA expenditure for 1995 was channeled through bilateral country programmes and the remaining 24% (NZ\$ 38.845 million) through multilateral agencies. Bilateral assistance comprises budget support, programme assistance, project aid, technical assistance education and training assistance, institutional support, and co-financing of Non Government Organisations and private sector initiatives.

The education and training sector ranked third in the priorities as shown in the 1995 expenditure (see Figure 4.1). The 1995 expenditure in education and training show that there is a significant decline (11% NZ\$ 18.516 million) when compared with the 1994 expenditure which comprised about 34% (NZ\$ 48.02 million) of the total ODA.

Figure 4.1
New Zealand's Official Development Assistance Programme Expenditure
1995-1996



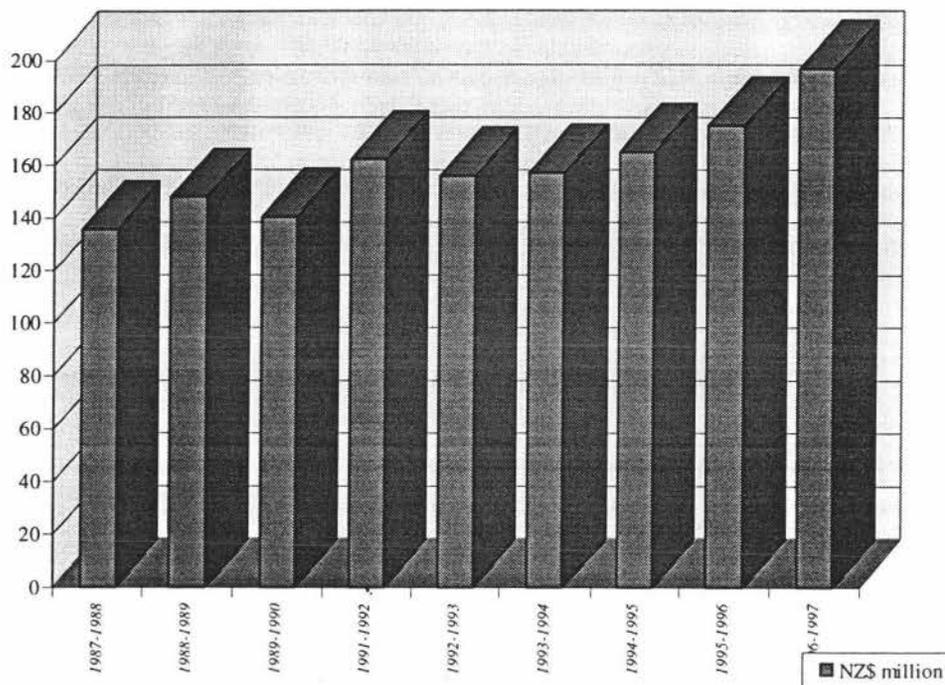
Source: Figures for 1995/96 are based on NZODA Programme Profiles of the Development Cooperation Division of the Ministry of Foreign Affairs and Trade, Wellington, New Zealand.

Figure 4.2 shows New Zealand's ODA performance from 1987 to 1996²⁵. There has been a marked increase in 1991-1992 when the total ODA contribution reached NZ\$ 162.2 million; and also in 1996 to 1997 as shown by the fiscal year allocation in Figure 4.2. However, the years 1992 to 1994 showed a relatively stable performance around NZ\$ 56-57 million.

New Zealand ODA disbursement in 1996 rose by NZ\$ 10.07 million over the 1995 figure (NZ\$ 164.982 million) to a total of NZ\$ 174.903 million. This represented 0.23% of GNP with 0.2% in 1995.

²⁵ Year 1997 is based on an allocation only.

Figure 4.2
Growth of New Zealand's Official Development Assistance
1987 - 1997



Source: Figures for the years 1987-1993 are based on the 1988-1994 NZODA Programme Profiles of the Development Cooperation Division of the Ministry of External Relations and Trade, Wellington, New Zealand. Figures for the years 1994-1997 are based on the Programme Profiles of the Development Cooperation Division of the Ministry of Foreign Affairs and Trade, Wellington, New Zealand.

Note : Figures for the years 1987-1996 are based on actual expenditures, while 1996-1997 is based on MFAT allocation for the current year.

Bilateral aid to different countries is spend through country programmes, and follows the pattern of recent years. Assistance to the developing countries of the South Pacific, particularly the Cook Islands, Fiji, Western Samoa and NUIE, continues to be the main region of concentration for New Zealand bilateral aid. Southeast Asia, in particular the area covered by the five nations

in ASEAN (the Philippines among them), was the second²⁶ region of concentration for bilateral aid in the last decade²⁷.

Table 4.1 shows the distribution of New Zealand's bilateral assistance by programme expenditure in South and South East Asia. The data further shows that the Philippines continue to dominate the volume of New Zealand's bilateral assistance, after Indonesia. The Philippines receives a large slice of New Zealand aid signifying a very good relationship between the two countries.

Table 4.1
New Zealand's bilateral assistance programme expenditure
1995-1996

South and South East Asia	
ASEAN	NZ\$ (000)
Indonesia	4679
Philippines	3035
Thailand	1326
ASEAN Regional	1202
Malaysia	20
Sub-total	10262
Other Asian	
Cambodia	440
China	1050
Laos	497
Mongolia	250
Vietnam	993
South Asia (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka).....	825
Asia Regional	1924
Development Assistance Facility	5150
Other Asian Programmes sub-total	11130
ASIA Total	21392

Source: Figures are based on the 1988-1994 NZODA Programme Profiles of the Development Cooperation Division of the Ministry of Foreign Affairs and Trade, Wellington, New Zealand.

²⁶ Current year 1996-1997 showed that ASEAN ranked third, over placed by Other Asia countries.

²⁷ Previous allocations were done in the light of a Pledge by the Prime Minister of New Zealand at the 1977 ASEAN Summit Meeting that New Zealand would contribute \$50 million in development in the ASEAN group over a five year period.

The New Zealand-Republic of the Philippines Relationship

Bilateral and multilateral ties between New Zealand and the Philippines have been increasing and augur well for more fruitful future relations. The Philippines has hosted several official visits from New Zealand Prime Ministers²⁸. Furthermore, New Zealand Prime Minister David Lange was one of the first world leaders to extend recognition to the Aquino government in 1986. He was also one of the first to visit the country following the People Power Revolution, visiting the country twice in 1986. Several high-level visits have also been exchanged between the two countries. New Zealand has also been very supportive of the goals and initiatives of ASEAN. Together with Australia, it was the first to establish a dialogue partnership, several projects in the fields of economic cooperation, trade and investment promotion and technology transfer have been successfully implemented to the benefit of ASEAN and its individual member countries (Government of the Philippines 1996).

Among the ASEAN countries, the Philippines, together with Indonesia and Thailand, are the main recipients of New Zealand development assistance, as shown in Table 4.1. The development assistance to the country has substantially focused on rural development, forestry/environment and education, largely because New Zealand has a comparative advantage in the areas of forestry and agriculture.

Both countries are also members of the Asia-Pacific Economic Cooperation (APEC) and the United Nations as well as other international bodies. Mutual

²⁸ In 1966, Prime Minister Keith Holyoake arrived in Manila to attend the Manila Summit on the Indochina conflict. In 1976, and again in 1980, Prime Minister Robert Muldoon visited the Philippines.

support for each other's candidacies and initiatives in multilateral forums have been a hallmark of Philippine-New Zealand relations. The Philippines also successfully obtained New Zealand's support for its various candidatures in the International Court of Justice, International Maritime Organisation, United Nation Economic and Social Council, and World Meteorological Organisation. Close cooperation has also been maintained in the other multilateral organisations, for example, within the context of ASEAN's dialogue relationship with New Zealand²⁹; in the Cairns Group; Uruguay Round of GATT; and in APEC.

Although trade and investment relations between the two governments have been moderate, efforts in trade promotion projects and investment missions have been initiated under the ASEAN-New Zealand Trade and Investment Promotion Program (TIPP). New Zealand is the Philippines' 25th trading partner³⁰, cornering a 0.36% share of the country's total trade with the world. For the period 1985 to 1995, the Philippines experienced a huge trade imbalance with New Zealand due largely to the country's growing dependence in dairy products from New Zealand which account for 62.6% of the country's total imports (Philippine Government 1996). Philippines and New Zealand signed a trade agreement in 1968 which accorded to either country most-favoured nation treatment. Trade relations took a new impetus following the establishment of the Philippine Embassy in Wellington and the revision of the trade agreement in 1976, which further affirmed the determination of both countries to strengthen and diversify bilateral trade. An agreement on avoidance of double taxation was also signed on 29 April 1980.

²⁹ In 1994 the Philippines became the coordinator of the RP-New Zealand Dialogue.

³⁰ While Philippines is New Zealand's 15th largest market; top products from New Zealand consisted of dairy products, wood products, paper and paper products.

Generally, bilateral trade between the Philippines and New Zealand has been on the rise (Philippine Government 1996). In 1985, trade volume was valued at \$42 million, growing by 12% in 1986 to \$47 million. This was followed by successive growths in the volume of goods traded, reaching \$60.4 million in 1987 to \$70.9 million in 1988. The following year, total traded goods rose by 52% to reach a volume of \$107.8 million. However, decreases in the trade volume were recorded for the period 1990 and 1991 where the trade figures were registered at \$96.7 million and \$79.3 million, respectively. Trade continued to rise again beginning 1992 as a result of a bilateral quarantine agreement signed between the two countries in 20 May 1991 which allowed for greater access of the Philippines' fresh and processed agricultural products (MFAT 1995). The rising levels of both exports and imports resulted in increases in the bilateral trade for the years 1993 and 1994 amounting to \$135.7 million and \$146.3 million, respectively. However, in spite of the increase in trade, Philippines needs to improve its export performance which had been fairly sluggish in recent years in order to reduce its huge trade imbalance with New Zealand³¹.

The Philippines ranks low among ASEAN countries in terms of trade with New Zealand. Singapore is New Zealand's 15th largest source of import, Malaysia 16th, Indonesia 20th, and Thailand 21st. The Philippines and Brunei do not appear on the list of major sources of imports (Philippine Government 1996). Merchandise exports consisted of consumer manufacturers such as garments (women's and infant's wear), 29.9%; industrial manufactures, mostly electronics, 24.6%; processed and fresh food, notably fruits and vegetables,

³¹ In 1991, 1992 and 1993 the country's trade deficit with New Zealand were registered at \$58.94 million, \$80.93 million and \$108.19, respectively. In 1994, the Philippine's trade deficit with New Zealand was registered at \$110.25 million. While from January to May, 1995, total volume of goods exchanged amounted to \$60.8 million, with exports totaling \$7.6 million and imports reaching \$52.3 million for a trade deficit of \$44.6 million.

21%; gifts, toys and housewares, 6.97%; fashion accessories, 2.53%; furniture, 2.56%; and others (Philippine Government 1996). New Zealand's per capita consumption of bananas is 54 million kilos, one of the highest in the world. They accounted for 26% of household expenditure on fruits. Historically, Philippines was New Zealand's major source of bananas. Demand from nearby countries like Korea (which has been importing Philippine bananas at competitive prices), however, along with limitations in transport facilities, prevented the Philippines from improving this market. The keen interest and the envisioned strengthening of shipping lines in the Asia-Pacific region may allow further trade to develop from the Southern Philippines to New Zealand via Australia. As part of bilateral agreements, aside from trade and investment, New Zealand and Philippines are also involved in development cooperation, known as aid assistance.

The New Zealand Official Development Assistance to the Philippines

The New Zealand's Official Development Assistance to the Philippines aims to promote sustainable economic and social progress and justice in the Philippines and serves to foster a mutually beneficial relationship (Reyes 1986). A particular characteristic of New Zealand's assistance for the Philippines has been its 100% grant element. This includes cash grants, technical assistance, material supplies and training. The amount allocated from New Zealand ODA to the Philippines for the fiscal year 1996/1997 amounted to NZ\$3.0 million, 1% down from the NZ\$3.035 million allocation for fiscal year 1995/1996, and a 15% increase from the 1994/1995 allocation of NZ\$ 2.6 million (MFAT 1994; MFAT 1995; MFAT 1996).

Development Cooperation Priorities

New Zealand and Philippines have an outstanding history of technical cooperation. More than 20 years ago, in February 1973, the New Zealand government provided a NZ\$ 400,000 technical assistance-grant to the Philippines for the exploration of Tongonan, Leyte. Since then, New Zealand has been an active partner of the Philippine National Oil Company (PNOC) in pioneering the geothermal development in the country. Part of this cooperation has been extended to the forestry industry by putting pilot study areas on watershed protection and in management procedures for the sustenance of the geothermal reserves. A further extension of this cooperation was the joint social forestry project in watershed reservation areas started in 1988/1989 to complement policies on watershed management (MERT 1989).

Through the years, rural development, forestry/ environment and education and training have accounted for the lion share of New Zealand's development cooperation activities in the Philippines. They all have been underscored by support for institutional strengthening activities and have advocated multidisciplinary and community-based approaches. The New Zealand assisted forestry projects have become models in social forestry and private industrial plantations (NEDA 1992). A recently approved project, entitled the In-country Training Project³², aims to promote power development and decentralisation by training personnel associated with the Rural Electrification Cooperative Program and the Local Government Units Strengthening Programme. A summary of the New Zealand projects in the Philippines are shown in Table 4.2.

Types or Forms of Assistance Rendered

The Philippine government has sent engineers, physicists and chemists to New Zealand to study geothermal technology. New Zealand scientists and engineers

³² The project was approved in 1995 and commenced in 1996.

Table 4.2
Summary of New Zealand aid projects and expenditures in the Philippines
1987-1996

Projects	Expenditures (NZ\$)							
	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Rural Credit (approved 1987)	*							
Energy Cooperation Programme (approved 1987)	*							
Philippine National Oil Company Social Forestry (proposed 1987)	116,000	180,000	316,000	683,000	877,000	1,087,000	1,297,070	2,037,620
Bukidnon Industrial Plantation Forestry (approved 1987)	710,000	1,350,000	2,270,000	4,093,000	5,191,000	6,318,000	7,367,198	8,467,198
Small Projects Fund (approved 1987; commenced 1985)	*							
San Isidro Rural Systems Development (proposed 1987)	*							
VISCA Extramural Programme for Rural Development (proposed 1987)	230,000	85,000						
Small-scale Geothermal Development (proposed 1987)	*							

Table 4.2 continued.

Projects	Expenditures (NZ\$)							
	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Geothermal Project (proposed 1987)	*							
Training and Education (approved 1988)	390,000	450,000	430,000	1,728,000	1,728,000	3,327,735	4,429,937	5,195,520
ASEAN/NZ Afforestation (ANZAP) (ended 1987)	*							
Bukidnon Ancestral Land Taskforce (approved 1991/92)								
Bukidnon Small Projects Fund (subject to annual approval)			25,000	45,000	74,502	96,508	117,500	145,650
Geothermal Training (commenced 1990-91)			33,000	146,000	246,000	334,000	414,400	110,000
In-country Training							50,000	43,000
Short Term Training (commenced 1995-96)	*							

Sources : NZODA Programme Profile, MERT 1987-88. NZODA Programme Profile, MERT 1988-89. NZODA Programme Profile, MERT 1989-90. NZODA Programme Profile, MERT 1990-91. NZODA Programme Profile, MERT 1991-92. NZODA Programme Profile, MERT 1992-93. NZODA Programme Profile, MFAT 1993-94. NZODA Programme Profile, MFAT 1995-96. NZODA Programme Profile, MFAT 1996-97.

Note : * data not available.

have gained valuable experience from the challenges posed by the multi-million dollars attempt to develop geothermal power in a country heavily dependent on importing energy in the form of oil for diesel generators. Cooperating with the Philippine Government, New Zealand with its expertise in geothermal power technology is harnessing the energy of 2 thermal fields on the islands of Leyte and Negros. With its geothermal projects, the Philippines is now producing more electricity from underground steam (Lacambra 1996).

Other areas for technical cooperation between the New Zealand and the Philippine include: the utilisation of coconut stems, the development of the dairy industry, the improvement of agricultural technology and the development of teaching methodologies in education (MERT 1988; MERT 1992). Fellowship awards for academic study and short- term courses in New Zealand and other developing countries have also been provided for Filipinos.³³ These fellowship awards under the NZODA *Programme in Education and Training* is the focus of this thesis.

The NZODA to the Philippine Education and Training

How the New Zealand ODA budget on Education and Training is being spent shows its priorities. The New Zealand's bilateral assistance programme expenditure for Education and Training for the Philippines in 1995-1996 amounted to NZ\$ 5,195,520. However, the in fiscal year of 1996-1997, a big decline in the budget was observed, which amounted to more than NZ\$1 million. The decline in the education and training budget could be linked on the priorities of the assistance, in which new project-the In-Country Training was

³³ Under the Colombo Plan until 1987, and was replaced by New Zealand Official Development Assistance to present.

approved in the Philippines and in some other countries like Indonesia and China.

The NZODA Programme in Education and Training

The Education and Training is composed of three projects, the Study Awards and Postgraduate Scholarship Schemes, The Study Awards (Geothermal) and the In-Country Training project. This thesis excludes the Postgraduate Scholarship and the In-Country Training both projects that have been recently commenced. The Study Awards project commenced in 1988 and involves awards for postgraduate university study in areas wherein New Zealand has particular expertise. This project primarily aims to transfer skills and technology to assist the social and economic development of the Philippines, especially in the area of rural development. It is also designed to strengthen ties between New Zealand and the Philippines. Study Awards geothermal on the other hand, commenced in 1990/91 and was stopped in 1996. It involved postgraduate diplomas in Geothermal Engineering at the University of Auckland's Geothermal Institute. It aimed to transfer skills and technology in geothermal development to the appropriate institutions in the Philippines. However, respondents in this thesis include those whose applications were processed with the Philippine Special Committee on Scholarships (SCS)³⁴.

The number of postgraduate students and trainees differ from year to year as the funding for Education and Training is approved annually. For example, study awards budget allocation for fiscal year 1996-1997 is NZ\$1,100,000, a 78% decline from the 1995-1996 budget allocation of NZ\$ 5 million. In 1995-1996 there were 16 postgraduate students sent to New Zealand. The number of students has decreased in comparison to 1990-1994 in which there were at

³⁴ Study Awards (Geothermal) was once under SCS, until 1993; budget, selection and management of scholarships not under differ from those who were under.

least 30 or more students in each year, as shown in Table 4.3. Records show that the number of students and course programme are significantly affected by the New Zealand National budget allocation. For example, in the year 1996-1997, there were 13 students, of which only two were given Masterate programmes. Diploma programmes are now given priority because New Zealand and the Philippines would like to spread the privilege of education and training to other deserving institutions in the Philippines. However, such a change of focus may have a subsequent affect on the transfer of skills and technology. Filipinos who studied overseas for short period of time, have had an increase in knowledge and skills they acquired, as found by Sr. Mallillin in her 1981 study of educational aid in the Philippines.

Table 4.3
NZODA's bilateral aid programme expenditure for fully funded
Filipino students and trainees in New Zealand
1990-1997

Year	Number of students	Expenditure (NZ\$)
1990-1991	34	350,000
1991-1992	33	1,728,000
1992-1993	31	1,728,000
1993-1994	30	3,327,735
1994-1995	20	4,429,937
1995-1996	16	5,195,520
1996-1997	13	1,100,000

Sources: NZODA Annual Review 1990-1991. NZODA Annual Review 1991-1992. NZODA Annual Review 1992-1993. NZODA Annual Review 1993-1994. NZODA Annual Review 1994-1995. NZODA Annual Review 1995-1996. NZODA Programme Profile 1996-1997.

Note : 1996-1997 expenditure is based on allocation only, while number of students was based on interview with the 1996-1997 grantees.

Philippine Participation

Philippines is represented by the National Economic Development Authority (NEDA) for Bilateral and Multilateral agreements. NZODA to the Philippines

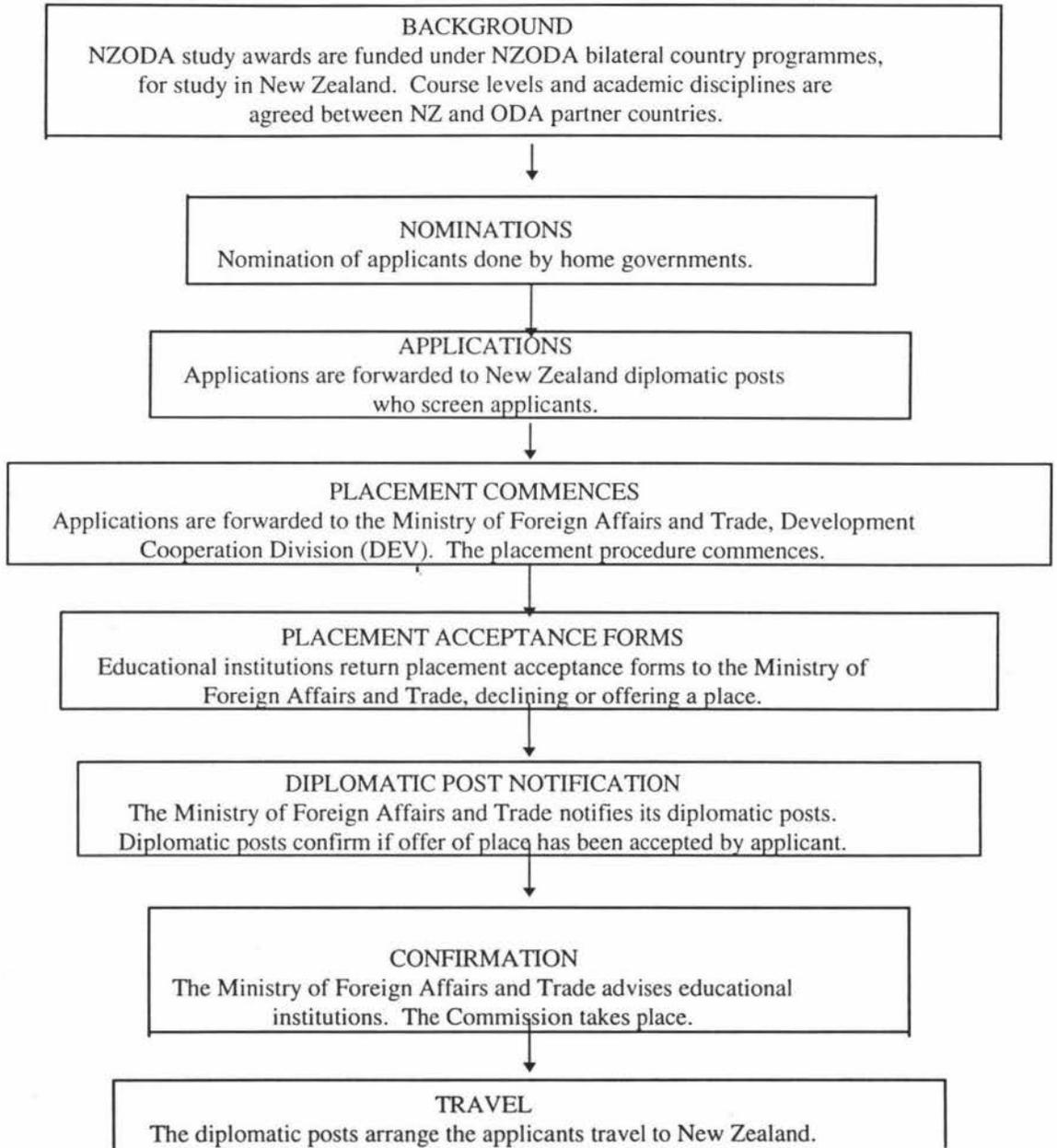
is managed by NEDA. NEDA chairs the Philippine Special Committee on Scholarship (SCS), and handles the NZODA Education and Training. The Philippine Special Committee on Scholarship is represented by the Department of Foreign Affairs (DFA); the Department of Education, Culture and Sports (DECS); and NEDA itself. SCS does the selection and nomination of applicants. Invitations to endorse possible applicants were extended to different institutions that have an interest in the different academic disciplines agreed in the NZODA Education and Training agreement. Possible applicants who meet SCS's requirements are then scheduled for a panel interview. The panel includes officials or representatives from the following: the Department of Foreign Affairs (DFA); Department of Education, Culture and Sports (DECS); the National Economic Development Authority (NEDA); the inclusion of a representative of the Civil Service Commission (CSC) and one from the Academe. The Academe is represented by different institutions every year. The panel uses a 100 point assessment system with ten major criteria³⁵. Successful applicants who pass the panel interview have also to pass the medical examination and the International English Language Testing System (IELTS). Successful applicants are then nominated by SCS. The names of the successful applicants are forwarded to New Zealand's diplomatic post in Manila.

New Zealand Participation

The NZODA Study Awards are funded under the NZODA bilateral country programmes, for study in New Zealand. Course levels and academic disciplines are agreed between New Zealand and Philippines. New Zealand does the placement (see Figure 4.3). Further, New Zealand is responsible for contracts administration support through the International Student Office in each institution. The monitoring - interview to successful grantees are done in their

³⁵ Points are not equally divided; weights are given to different criteria.

Figure 4.3
NZODA Study awards placement process



Source: Student Information for Study Awards and Postgraduate Scholarships, Ministry of Foreign Affairs and Trade Development Cooperation Division, February 1996.

respective institutions semestrally. The reporting and the award costs are also responsibilities of the New Zealand (MFAT 1996-97:89).

The International Students' Office (ISO) at different institutions in New Zealand is the MFAT representative. The ISO informs the students about the allowances and entitlements, the academic programme and all course related issues, including enrollment. It also provides advice on accommodation and other support services; checks on the students academic performance, interviews students semestrally regarding their study and reports to the MFAT on their progress. The MFAT then informs SCS in the Philippines.

However, some aspects of the management and administration of education and training are contracted out and it seems more will be contracted out in the future (MFAT 1993). MFAT, in their 1993 review of management and administration found that their management and administration is overly complex and could be substantially improved by greater clarity, simplicity, substantially improved by greater clarity, simplicity, transparency and consistency. The study concluded that future Management and Administration of NZODA to Education and Training should be guided by one rationale:

to contribute to sustainable economic and social progress and justice in partner countries through the transfer of knowledge and skills
(MFAT 1993:2)

and having the following objectives:

- *the provision of education and training opportunities which meet defined human resource development needs;*
- *the development among people in the recipient country (especially those who are or will be community leaders), familiarity with and a favourable disposition towards New Zealand;*
- *ensuring NZODA to education and training is cost effective;*

- *provision of equitable access to educational opportunities;*
- *demonstration of New Zealand's educational and technical expertise; and*
- *return of a reasonable proportion of the NZODA dollar to New Zealand (MFAT 1993:2-3).*

Summary

Data and literature on MFAT publications show that some of the NZODA objectives for education and training can be easily answered, while others are more difficult to address. The objective related to the provision of equitable access to educational opportunities is a significant issue in the Philippines. The idea of offering diploma programmes instead of those at the masterate level shows that it is possible for more to be given the opportunity for the possible development of knowledge and skills. When one considers the rate of return of a proportion of the NZODA dollar to New Zealand, more than 90% of the dollars spent in education and training returns to New Zealand (CID 1996). International students study and spend their money in New Zealand. Other objectives like the returns and outcomes proves more difficult to answer. These issues are the focus of the next two chapters.

PART III

CASE STUDY ANALYSIS

As discussed in Chapter One, the main objective of this thesis is to determine results and examine the effectiveness of the New Zealand Official Development (NZODA) Education and Training Programme to the Philippines. One of the methods applied to achieve the thesis goals was to carry out a survey to measure the results and the effectiveness of the said programme. The survey reflects the actual results of the education obtained under the NZODA programme by the Filipino graduate grantees (graduate recipients of the programme). It covers the graduate grantees' view of the actual results of the programme in relation with their present work (includes productivity and earning) and of the costs and benefits. It is important to note, however, that on the effectiveness, the survey reflects only the perception of the graduate grantees and the government representatives/officials. Part III is divided into two chapters. Chapter Five presents the results of the New Zealand Official Development Assistance Education and Training Programme to the Philippines; while Chapter Six examines the effectiveness of the programme.

CHAPTER FIVE

RESULTS OF THE NEW ZEALAND OFFICIAL DEVELOPMENT ASSISTANCE EDUCATION AND TRAINING PROGRAMME TO THE PHILIPPINES

Introduction

This chapter presents the survey results of the NZODA Education and Training programme to the Philippines, particularly to the graduate grantees (direct recipient) and the Philippine society (in general); while presentation, analysis and interpretation on the effectiveness of the programme is left until Chapter Six. This chapter is divided into two; first, the Characteristics of the Graduate Grantees are discussed and second, the Results of the programme in relation to the graduate grantees' work are presented.

Characteristics of the Graduate Grantees

This part presents data on the characteristics gathered from the survey with the graduate grantees which includes age, sex, locality of work and courses finished under the NZODA Education and Training.

Results of the survey on the demographic profile of the graduate grantees is shown in Table 5.1. Data in Table 5.1 shows that majority of the respondents, as represented by 67% males with a total of 53, while there are only 26 (33%) females. Majority of the male respondents (35%) are of the ages 33-38 years old, followed by the ages 39-44 years of age group as represented by 19%. The oldest of the male respondents is 57 years of age while the youngest is 27 years of age. On the other hand, majority of the female respondents (11%) is of the ages 39-44. This is followed by the age groups of 33-38 and 45-50 years of age with 8% and 7% respectively. The youngest female respondent is of age 29 while the oldest is 56 years of age. Data on age distribution of graduate respondents shows that in the Philippines, there are more male graduate

grantees than female with a ratio of 2.04³⁶. The ratio indicates that programme has produced two (2) male graduate grantees for every one (1) female grantee. Such a ratio indicates that the number of graduate grantees is unfairly divided between male and female, thus, the programme's objective for gender bias towards females does not appear to have been met.

Table 5.1
Age distribution of graduate-grantee respondents

Gender	Age						No Answer
	27-32	33-38	39-44	45-50	51-56	57>	
Male	5	26	14	2	3	1	2
Female	3	6	8	5	2	0	2
Locality							
Rural	5	12	5	5	3	0	3
Urban	3	20	17	2	2	1	1
Total	8	32	22	7	5	1	4
Ratio^a	1.67	4.33	1.75	0.4	1.5		

Source : Survey results of age profile of graduate grantees (1996).

Note : ^a ratio of male/female graduate grantees; ratio is computed as percent of male divided by percent of female graduate grantees.

Another important objective of the NZODA Education and Training is that of rural development. Data in Table 5.1 further shows that there are 41% (32) graduate grantees whose place of work is in rural areas, while more than half of the graduates are from the urban, as represented by 59% (47). A ratio of 1.47³⁷ indicates that three quarters of the programme graduate grantees are working in urban areas. The ratio indicates, then, that the number of graduate grantees is unfairly divided between urban and rural areas. Based on this, it can be said that the programme has produced a smaller number of graduates in the rural areas, who are expected to be of higher productive capacity than those who did not undergo the education programme. This implies, then, that NZODA's rural development objective is not achieving its intended result. This objective is also related to another objective of the programme which is to assist in

³⁶ Ratio is computed as per cent of male divided by per cent of female graduate grantees.

³⁷ Ratio is computed as per cent of urban divided by per cent of rural graduate grantees.

developing government offices as well as the private agencies and/or offices. Regarding this objective, it was recorded that there is only one private graduate-grantee respondent in this study. Records from secondary data show every fiscal year since 1989, there was only one (1) grantee that came from a private office. This shows that the programme has produced very few graduate grantees who work in private institutions. This result indicates that the programme has produced an unequal distribution between graduates from the private and government owned offices. The implications of this and further effects of actual results as related to Philippine development are discussed in Chapter Six.

Further, Table 5.2 shows that there are more male graduate grantees from the rural offices as represented by 51% as compared to the urban graduates of 16%. On the other hand, there are more female graduate grantees from the urban areas as represented by 19% than those graduates from the rural offices (14%).

Table 5.2
Graduate grantees in place of work and programme finished
under NZODA Education and Training Programme

	No. of Graduates	Ratio of urban/rural	Cert./ Trng	Dip.	Msc/ Mphil	Ph.D.	t-test
Gender							
Male	53	3.08	4	34	13	2	3.16 ****
Female	26	0.73	7	15	4	0	3.53 ****
Locality		Ratio of male/female					
Rural	32	3.64	7	18	5	2	3.18 ****
Urban	47	0.87	4	31	12	0	3.36 ****
Total	79	2.04	11	49	17	2	4.61 ****

Source : Survey results of graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$.

Table 5.2, also, shows that under the NZODA education and training programme, majority of the graduate grantees were awarded and finished diploma programme as represented by 64% of the male graduate grantees and

58% of the female. The data further shows that male graduate grantees were more likely to be awarded a programme of study in MS/ Msc/ MA (25%), while female graduate grantees were awarded in certificate/ training courses. It is worth noting that no female whose programme of study was awarded ever upgraded their award or continued to a Ph.D.

Courses Finished under the NZODA Education and Training Programme to the Philippines

Given the distribution of graduate grantees, the following section gives the breakdown of the courses finished under the NZODA Education and Training Programme to the Philippines. The distribution of courses finished by male and female graduate grantees are shown in Table 5.3. Data in Table 5.3 shows that courses finished under the NZODA varies from agricultural (49%), technology (31%), environmental (9%), development-education (5%), commercial (1%) and industrial (5%).

Among the female graduate grantees, programme of courses finished under agriculture are the Diploma in Agricultural Science (27%), the Diploma in Seed Technology (8%), and the Diploma in Agricultural Economics (4%). There are 15 % of the female graduate grantees who attended training/ certificate courses in seed technology. While it is worth noting also that there two (2) female respondents who finished Msc in Agricultural Science and one (1) with the degree Msc in Seed Technology. In the technology sector, programme of courses finished include the Diploma in Food Technology (8%), the Diploma in Meat Technology (8%) and the Diploma in Packaging (4%). There is only one (1) recorded graduate grantee for each of the Training and Certificate courses in Meat Technology, entitled Dairy Technology and Geothermal Technology. There is one (1) female graduate grantee who finished under the environmental sector with a degree of Msc in Resource and Environmental Planning.

On the other hand, programme courses finished by male graduate grantees varies from Diploma, Msc/ Mphil and Ph.D. on agriculture (42%), technology

(30%), environment (11%); development and education (8%); and industry (8%). Courses finished under the agriculture sector includes Msc and Certificate in Seed Technology, both represented by 2% of the male graduate grantees; Diploma in Agricultural Science (13%); Diploma and Msc in Agricultural Economics represented by 5.67% and 3.77% respectively; Diploma in Agricultural Engineering (2%); and Diploma, Msc and Ph.D. in Horticultural Science as represented by 8%, 4% and 2% respectively. Technology courses include Training and Diploma in energy geothermal technology with 2% and 17% respectively; Certificate/Training (4%), Diploma and Msc in geology/ geothermal technology with both 2%; Training in Dairy Technology (2%) and Diploma in Meat Technology (2%). In the environment sector, there are 6% who finished Diploma in Forestry with 2% with a Ph.D.; 2% for Diploma in Parks, Recreation and Tourism; and 2% finished with Msc in Resource and Environmental Planning. In development and education sector, there are 4% who finished Mphil in Development Studies while there is 2% for Diploma; and 2% for Msc in Regional and Resource Planning. In the environment sector there are 2% who finished with Diploma in Engineering, 4% and 2% respectively with MSC and Ph.D.; and 2% with Msc in Theoretical and Applied Mechanics. In the commercial sector, there is only 2% who finished the Diploma in Commerce.

It is worth noting that there are three (3) respondents whose programme of study were continued to a higher degree. These include one (1) respondent who finished the Diploma in Meat Technology which was continued to the Msc level; another finished the Diploma in Agricultural Economics which was continued to Msc in Agricultural Economics, and one who continued to Diploma in Agricultural Science after finishing a Certificate in Seed Technology.

The data in Table 5.3 further show that no female graduate grantee was upgraded nor given the chance to continue to a higher degree of programme of study. Furthermore, no female graduate grantee has been awarded with a

Table 5.3
Programme and Courses of Study Finished under the NZODA
Education and Training Programme

Gender Female	Cert/ Training	Diploma	Msc/ MPhil	Ph.D.	Total
Agricultural					
Seed Technology	4	2	1		7
Agricultural Science		7			7
Agricultural Economics		1	2		3
Technology					
Food Technology		2			2
Science Technology	1				1
Meat Technology		2			2
Dairy Technology	1				1
Packaging Technology		1			1
Geothermal Technology	1				1
Environmental					
Resource and Environmental Planning			1		1
Sub-total	7	15	4		26
Male					
Agricultural					
Seed Technology	1 ^a		1		2
Agricultural Science		7			7
Agricultural Economics		3 ^a	2		5
Agricultural Engineering		1			1
Horticultural Science		4	2	1	7
Technology					
Energy-Geothermal	1	9			10
Geology- Geothermal	2	1	1		4
Meat Technology		1 ^a			1
Dairy Technology	1				1
Environmental					
Forestry Science		3		1	4
Parks, Recreation and Tourism		1			1
Resource Environmental Planning			1		1
Development-Education					
Development Studies		1	2		3
Regional and Resource Planning			1		1
Industrial					
Engineering		1	2		3
Theoretical and Applied Mechanics			1		1
Commercial					
Commerce		1			1
Sub-total					53
Total					79

Source : Survey results (1996).

Note : ^a programme of study was either upgraded into or continued to the next higher degree.

Ph.D. programme. The programme awarded to male grantees appear more varied than those of the female grantees.

In general, the data in Table 5.3 shows that the sector in agriculture is given priority in the list of courses offered to the Philippines. This is followed by technology, environment and education/development. The list of courses offered shows that the provision of the NZODA education and training opportunities to the Philippines meet the human development needs of the country defined by NEDA.

Results of the NZODA Education and Training Programme to the Philippines

The results of the NZODA Education and Training Programme to the Philippines are determined through exploring the relationship of the obtained education of the graduate grantees with their respective work. Using a survey as the form of data collection, results in the graduate grantees' work that were looked at includes: change in income, change in work position or designation, productivity in work, confidence in the delivery of their work, and difficulties encountered.

When one considers the contribution of the obtained education³⁸ under the NZODA Education and Training Programme in relationship to the graduate grantees' present work, Table 5.4 shows that 84% of the female and 85% of the male graduate grantees indicated that obtained education is of very high significance. There are only four (4) female and eight (8) males graduate grantees who answered that their education under the NZODA programme is

³⁸ Education in this study refer to education/training obtained under the NZODA Education and Training Programme, unless otherwise stated.

of low significance with respect to their present work. Test statistics using t-test for proportion shows that among the graduate grantees, whether female or male, working from urban or rural, indicate that obtained education is highly significant to their present work, as indicated by $t=3.53$, $t=5.08$, $t=3.89$, and $t=4.81$.

Table 5.4
Perceived frequency values on the significance of
obtained education to present work

	Significance		Total	% Difference	t-test
	High	Low			
Gender					
Female	22 (84.62) ^a	4 (15.38)	26	69.24	3.53 ****
Male	45 (84.91)	8 (15.09)	53	69.82	5.08 ****
Locality					
Rural	27 (84.38)	5 (15.62)	32	68.76	3.89 ****
Urban	40 (85.11)	7 (14.89)	47	70.22	4.81****
Total	67 (84.81)	12 (15.19)	79	69.62	6.19 ****

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p<0.10$; ** Significant at $p<0.05$; *** Significant at $p<0.025$;

**** Significant at $p<0.01$.

On the other hand, significance of obtained education to present work shows that there is no difference with respect to their gender or locality of work. This means that rural and urban graduate grantees have the same level of perception on the significance of the obtained education to their work. This indicates then that obtained education is highly significant to graduate grantees' present work. This means that it is the grantees perception that education is being used and applied to work with high levels of significance.

In general, data in Table 5.4 further shows that there are 85% of the graduate grantees whose obtained education is of very high significance to their present work, while there are only 15% with low significance as represented by a total of 12 grantees. This result, represented by total percent differences that ranges from 69% (moderate difference) to a maximum percent difference of 96 (high difference) indicates then that graduate grantees are more likely to indicate higher level of significance of obtained education to their present work. This means that the obtained education proves to be significant to graduate grantees' work; that is, that education learned is being used and applied in their respective work.

The significance of obtained education to present work is further supported by the question on the extent of the relationship between their obtained education under the NZODA and their work. Table 5.5 shows that 92% of the female graduate grantees answered that obtained education is related. There are 54% who answered that obtained education is highly related to present work, while there are 23% who answered moderately related and 15% indicate low relationship. There are only two female graduate grantees who answered that it is of a very low relationship or no relationship at all, as represented by 8% of the total female graduate grantees. Education is also related in the sense that the institution where the graduate grantee is working with assigns the employee, not based on the expertise, but, rather on seniority; while for the other grantee, work is not related as obtained education but is about dietetics and her present work is about quality control.

Data in Table 5.5 further shows that among the male graduate grantees, there are 47% who answered that obtained education is highly related to their present work. Data further show that there are 30% who indicated a moderate

relationship, while there are 11% who indicated a low relationship. On the other hand, for both the very low and no relationship at all, there are 6% of male graduate grantees who answered for each criteria. Among the grantees whose obtained education is either of very low or no relationship at all, there are 67% answered that their obtained education cannot be used for the reason that upon returning to work, they were either assigned to another department or given another work load that was different from their award education. One is teaching Physical Education and Social Studies subjects while his finished education is Msc in Horticultural Science. One of them was assigned at the regional soil laboratory while the finished course in New Zealand was about animal science. Others include reasons such as crops studied in New Zealand are not suited to Philippine climate; education obtained is too much theoretical and very difficult to apply because of New Zealand and Philippines' different social structures and environment. One was not given the opportunity to choose work after coming back from studies; and one answered that he studied geothermal engineering while he is not working in a geothermal plant or project.

However, in general, it is worth noting that the relationship between the obtained education under the NZODA and the female-male graduate grantees' work is moderately related as represented by mean values of $x=1.808$ and $x=1.92$ respectively. Data in Table 5.5 further shows that there is no significant difference between the male and female graduate grantees perceived relationship of their work to the obtained education. This indicates that male and female grantees have the same level of significance of their obtained education in relation to their present work.

Table 5.5
Frequency values on the extent of relationship between work
and education obtained under NZODA programme

	High Relationship		Extent Low Relationship		No Relation At All	Total	Mean sd	t-test
Gender								
Female	14 (53.85) ^a	6 (23.08)	4 (15.38)	1 (3.85)	1 (3.85)	26	1.808 1.10	5.53****
Male	25 (47.17)	16 (30.19)	6 (11.32)	3 (5.66)	3 (5.66)	53	1.925 1.16	6.75****
Locality								
Rural	17 (53.13)	6 (18.75)	5 (15.63)	2 (6.25)	3 (9.38)	32	2.031 1.36	4.03****
Urban	22 (46.81)	16 (34.04)	5 (10.64)	3 (6.38)	1 (2.13)	47	1.83 1.01	7.49****
Total	39 (49.37)	22 (27.85)	10 (12.66)	4 (5.06)	4 (5.06)	79	1.93 1.2	7.93****

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Legend: 1.0 - 1.5 - High Relationship; 1.6 - 2.5 - Moderate Relationship; 2.6 - 3.5 - Low Relationship; 3.6 - 4.5 - Very Low Relationship; 4.6 - 5.0 - No Relation at all.

Locality of graduate grantees work, however, shows significant difference on the extent of the relationship of their obtained education and present work. Data in Table 5.5 shows that there are more graduates from the urban areas whose obtained education is highly to moderately related as represented by 81%, as compared with 72% of the graduate grantees working in the rural areas. There are 31% working in the rural who answered of a low relationship to no relationship at all, while there are a total of only 19% for graduate grantees working in the rural sector. Although mean values of 2.03 and 1.83 show that rural and urban graduate grantees have the same interpretation of

relationship of their obtained education and work, which is moderately related, a t-test value of 5.60 shows that there is a significant difference in the means values. These results indicate then that there are 40 % more of the graduate grantees working in the rural area whose present work is either lowly related or of no relationship at all than there are of those working in the urban areas. This further indicates that urban graduate grantees have a higher level of application of their obtained education to their work. This mean that urban graduate grantees have significantly higher level of application of their obtained education than that of the rural graduate grantees. The results reflect that education is used as a screening device in the rural areas, as stated by Denison (1962) and Psacharapolous (1986).

Results of Table 5.5 show that in general, graduate grantees' obtained education is of high to moderately significant to their work. This indicates then that obtained education is significantly used and applied to their present work as indicated by $t = -7.93$. This means that obtained education is serving its purpose by producing more productive workers, although education proves to be more beneficial to those working in the urban sector than those in the rural sector.

After the grantees graduated from their respective programme of study, there are 92% of the female and 90% of the male graduate grantees who answered that they were able to use what they have learned for a short period of waiting time only after their return to their respective offices. Among the female grantees, the majority of them were able to use their obtained education in production as represented by 27%. This is followed by female graduate grantees who are involved in research (19%), and teaching and extension programmes, with 15% for both field of work. It is worth noting that there are two female grantees who were able to used their obtained education in more

than one field of work. They are either involved in one or two of the above mentioned field of work. It is worth noting that there is one female grantee who has designed a workable quality control plant for milk and milk products that is now being used by the University of the Philippines at Los Banos (UPLB) mini-processing plant.

On the other hand, the majority of the male graduate grantees are involved in research (23%), followed by 19% in production and consultancy/ project evaluation; and 11% in extension programmes and teaching. It is worth noting that 17% were able to use their obtained education in more than one field of work and many of them have used their thesis or research done in New Zealand. One male grantee, for example, said that his thesis which involved the latest techniques in slaughter products are now being applied at the Food Technology Institute (FTI) in the Philippines. A Msc Agricultural Economics graduate answered that his thesis was used as reference for the Maasin watershed development; while another grantee answered that his thesis is now used as a reference in the planning and development of forestry projects in the Philippines. One of the grantees has initiated and conceptualised the Laguna de Bay regional master plan project. There is also an Mphil in Development Studies graduate, who, right after return has been working as a human rights consultant. However, there is amongst those whose education was not used, a graduate in Diploma in Horticultural Science is teaching a Technology and Home Economics paper³⁹. There is also a Diploma in Agricultural Science graduate who was assigned to a feed quality control unit. It is worth noting also, that the only grantee who graduated in recreation, parks and tourism was not assigned to the parks and recreation division when he returned from his study.

³⁹ Paper in the Philippines is called 'subject.'

These results, therefore, indicate that the obtained education has contributed to the educational and professional development of the majority of the graduate grantees, but not for all. There are some cases in which obtained education was not significantly related to their present work. The causes are more attributable to institutional problems. The reasons for the involvement of the graduate grantees are determined by their different respective institutional administrations. It is with this in mind education is best explained by the concept that there are other factors affecting an employee's performance or work. In this example, graduates are more subject to internal reasons identified by the graduate grantees such as: favoritism; "it's not what you know but whom you know" or "*palakasan*" in Filipino language; returning grantee seen as threat to administrators' positions; and also education as a "screening device" that is, that level of education is perceived as a determinant of graduates' performance. But in general, graduates have been contributing a lot to development as a result of their education. The results in this thesis indicate that education has produced more educated grantees as well as advancing the professional well being of the graduates.

On the other hand, the effect of obtained education to economic development can be reflected in the graduate grantees' increase in income from employment. In this, there are 73% female and 85% male graduate grantees who answered that their income changed two (2) years⁴⁰ after finishing their programme of study in New Zealand (See Appendix Table 5.6.1). Of the total female graduate grantees whose income was changed, 42% said that the increase was due to the obtained education, and 58% said this was not the case. Among those who answered that the increase was not due to education, nine (9)

⁴⁰ Two (2) years was used because usually in the Philippines, evaluation is done every three (3) years. It is in this sense that it is assumed that the grantees have had evaluation soon after or while about to finished their programme of study overseas.

answered that the increase in their income was due to government mandatory increases in salary. Female graduate grantees further answered that the possible reasons for no increase in income were: promotion depends on the institutional board, while others said that there was no available item or position and promotion depends on the national budget. They further reiterated that one of the possible reasons was that the Diploma as a programme is not recognised in the Philippines. There were 56% male graduate grantees who answered that increase in income was not due to obtained education. The reason was the same as of those of the female graduates; that is, because either Diploma is not recognised in the Philippines and/or there was no available position or item and dependence on the national budget. Among those who answered that there was an increase, 14 of them answered that the reason was due to government mandatory increases. Nine answered that it was because of their performance and the yearly promotion policy of their company. It is worth noting here that the yearly promotion is related to some of the private institutions. Yet, the majority of private and government institutions apply the three year interval in evaluation. T-test values show that both male and female graduate grantees' increase in income are not significant, although in total, the increase is significant. Increase in income was due to the obtained education, however, those without an increase indicate no significant difference. This means that increase in income is independent on gender.

With relevance to the locality of graduate grantees, there were 75% rural and 87% urban graduate grantees whose income changed after two years of finishing their programme of study. Of the rural graduate grantees, only 41% answered that the increase in their salary was due to education, while there were only 32% from the urban graduate grantees who increased. A percent difference of -23% among the urban graduate grantees shows that there were

Table 5.6
T-test values on education and change in income

	T-test values on change in income		
	due/not due	with/without increase	increase due/ without increase
Gender			
Female	-0.69	2.35 ***	0.26
Male	-0.75	5.08****	12.00****
Locality			
Rural	0.65	2.75****	0.65
Urban	-1.33*	1.20	1.79**
Total	-1.00	5.64****	2.16***

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$.

more whose income increase was not due to education. This result among the urban graduate grantees signify a weak to moderate difference between those whose income increased as a result of education compared to those who did not. It is worth noting that there is a slightly higher percentage of graduate grantees working in the rural areas whose income increased due to education than those in the urban areas. Among the rural graduate grantees there is a low differential in the number of those who increased their income due to education as compared to those who did not (13% increased). This result supports the finding in Table 5.5, that in the rural areas, education is still used as a screening device. A total of -13% (a negative sign indicates that there were more whose increase in salary was not due to obtained education) difference shows that there is a low differential regarding the increase in salary when the effects are related to education or not. A total of 63% shows that there is a big difference in the number of graduate grantees whose income increased after two years,

however, of the total graduate grantees, only 35% answered that the increase in salaries was due to education alone. Test statistics show that it was only in the urban graduate grantees where obtained education made a significant contribution to increases in income. Urban graduate grantees reflect that education has had a significant effect on those working in the urban areas, as shown in Table 5.6. In general, obtained education is significant to the increase in graduate grantees' income, as represented by $t=2.16$. This means that education is significantly important with respect to the grantees' increase in income; thus education is important in developing this economic aspect.

The issue of increase in income is related to the issue of change in position, usually to a higher one. Appendix Table 5.7.1 shows that among the female graduate grantees, there are 54% whose work positions were promoted. However, eight of them, or 31% of the total number of females answered that their promotion was due to the educational qualification they derived from the programme. There were 53% male graduate respondents who were promoted, and of these, only 11% answered that the promotion was not due to the educational qualification they obtained from the programme. Test statistics in Table 5.7 shows that among the male graduate grantees, change in work position is significant with respect to whether it was due or not due to obtained education, as indicated by $t=2.58$. In this issue gender shows no significant difference. This result means that gender bias; that is, male as the more preferred worker rather than the female was not given a priority. This result implies that both male and female graduate grantees have very similar levels of mobility of work position or designation.

Table 5.7
T-test values on change in work position or designation after the education

	t-test values on Change in work position/designation		
	due/not due	with/without increase	due/without increase
Gender			
Female	0.53	0.39	-0.89
Male	2.58****	0.41	-0.71
Locality			
Rural	2.98****	1.06	0.56
Urban	1.04	-0.15	-1.62*
Total	2.78****	0.56	-0.85

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$.

Among the rural and urban graduate grantees, there are more rural graduate grantees whose positions/designations were changed due to education, as indicated by a high percent difference of 68, as compared to those from the urban with a weak to a moderate percent difference of 22. In total, 50% of those working in the rural areas signified that obtained education changed their work position, while there was only 30% from the urban areas. There is therefore a total of 38% of the total graduate grantees who work position was changed due to obtained education. It is worth noting also that there are more urban graduate grantees whose work position did not change (whether due or not due to obtained education), and that among the rural graduate grantees, a value of $t = 5.60$ shows that change in work position or designation is significant. This means then that mobility in positions or designation is faster in the rural sector rather than the urban. This result supports the findings in Table 5.5 and 5.6, that is, education in the rural areas is still used as a screening

device. Among the urban graduate grantees, on the other hand, there was a lesser proportion of the graduate grantees with promotion due to the obtained education compared with the rural. This indicates a significant difference from the without promotion group, as indicated by $t=-1.62$. This implies then that among urban graduate grantees, obtained education has resulted in a significant change in terms of the mobility of work position or designation. The change, however is negative, in that there are more that are not promoted as opposed than to those who are promoted. This again, implies that mobility in work position or designation is higher compared with the urban graduates. This further implies that obtained education has resulted in more chances of promotion if a grantee is working in the rural sector rather than in the urban.

In general, however, mobility of work position or designation is not significant, as indicated by $t= -0.85$. This implies the number of those who were promoted due to education shows no significant difference with the number of those who were not promoted. This means that obtained education has not made a significant effect on the mobility of work position or designation of graduate grantees. Reason for this could be attributable to the fact that with the exception of only one grantee, graduate grantees are working in government institutions, wherein promotion is determined by the government budget and not by the qualification of the employees. This result is supported by the graduate grantees' perception of their duty in carrying out productive development work in their respective offices, which is discussed in Table 5.8.

Table 5.8
Carried out productive development work in their respective office of work

Criteria	Gender		t-test	Locality		t-test	Total
	Female	Male		Rural	Urban		
have already carried out development	10 (38.46)	19 (35.85)	-0.14	13 (44.83)	16 (55.17)	-0.56	29 (36.71)
carried out some development but would like to carry out more developments	6 (23.08)	17 (32.075)	-0.44	8 (34.78)	15 (65.22)	-1.46*	23 (29.11)
have not yet but would like to	10 (38.46)	17 (32.075)	-0.33	11 (40.74)	16 (59.26)	-0.96	27 (34.18)
Mean	2.00	1.96		1.94	2.00		1.97
sd	0.89	0.83		0.88	0.83		0.86
T-test	-5.73****	-9.12****		-6.81****	-8.26****		-10.65****

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$;

**** Significant at $p < 0.01$.

Table 5.8 shows the perception of graduate grantees towards carrying out productive development work in their office/department or institution. Data shows that there are 38% of the female graduate grantees who answered that they had already carried out productive work in their office/department. This is followed by 23% who answered that they had carried out some development but would like to carry out more. While there are 38% who answered that they have not carried out any development but would like to if given the chance. Thirty six percent of the male graduate grantees answered that they had already carried out productive development work. This is followed by 32% who answered that they had carried out some developments already but still would

like to carry out more development, while the same number of male graduate grantees answered that they have not yet carried out any development as yet but they would like to.

In general, the graduate grantees have carried some productive developments already but would like to carry out more developments as represented by mean values of $x=2$ and $x=1.96$ for female and male graduate grantees respectively.

Data in Table 5.8 further shows the number of graduate grantees in the rural and urban with respect to their development work. There is a low percent difference (-10%) in the number of graduate grantees from the urban than the rural who have already carried out development work in their respective offices. This percent difference also indicate that there are more graduate grantees from the urban than the rural who have carried out productive work. However, a percent difference of -30% signifies that there is a moderate difference in the number of graduate grantees working in the urban and the rural who have carried out development but would like to carry out more developments. Percent differences, however, is explained by mean values and t-test values that no differences exists in the way rural and urban graduate grantees have been or are carrying out development work in their respective office of work.

In general, t-test values, as represented by $t= -10.65$ in Table 5.8 shows that the perceptions of the graduate grantees have a significant difference. This means that graduate grantees have carried out productive development work in their respective office of work but would like to carry out more developments. This further implies that education offered by the NZODA Education and Training has developed a sense of confidence for their work in their respective work offices. This result is further supported by the result in the perception of

the graduate grantees' level of confidence as acquired from NZODA Education and Training as related to the delivery of their work role, as shown in Table 5.9.

Table 5.9
Graduate grantees' level of confidence as acquired from NZODA education in relation to the delivery of their work role

	Extent					Total	Mean	T-test
	Very	Confident	Confident	Very Low	Confidence		sd	
	Confident							
Gender								
Female	8 (34.78) ^a	8 (34.78)	6 (26.09)	1 (4.34)	0 (0.00)	23	2.00 0.90	-5.33****
Male	23 (43.40)	27 (50.94)	3 (5.66)	0 (0.00)	0 (0.00)	53	1.62 0.60	-16.74****
Locality								
Rural	13 (44.83)	13 (44.83)	3 (10.34)	0 (0.00)	0 (0.00)	28	1.68 0.77	-9.07****
Urban	18 (38.30)	20 (46.81)	6 (12.77)	1 (2.13)	0 (0.00)	45	1.79 0.75	-10.82****
Total	31 (40.79)	35 (46.05)	9 (11.84)	1 (1.32)	0 (0.00)	73	1.74 0.76	-14.17****

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Legend: 1.0 - 1.5 - Very Confident; 1.6-2.5-Moderately Confident; 2.6-3.5 - Confident; 3.6-4.5 - Low Confidence; 4.6-5.0 - Very Low Confidence.

Table 5.9 shows the number of graduate grantees who answered that as an outcome of the obtained education, they are confident in their work role in their respective work offices/institutions. Data in Table 5.9 shows that female graduate grantees are very confident in the delivery of their work role as represented by 88% of them, while all male graduate grantees answered that

they are very confident (100%). Regarding the extent of their confidence, female graduate grantees answered that they are confident as represented by a mean value of $\bar{x}=2$. Male graduate grantees on the other hand is represented by a mean value of $\bar{x}=1.63$, which means that they are also confident. It is worth noting that one female graduate grantee answered that her level of confidence was moderately low. Among the female graduate grantees who answered that they were not confident (8%), the reason why they were not confident is because their acquired knowledge has not been tapped in the office; that is, they have not been given the chance to share what they have learned.

On the level of confidence as acquired from education in relation to the delivery of their work, data in Table 5.9 further shows that rural graduate grantees are more confident than the urban graduate grantees. It is worth noting also that there is one graduate grantee who is working in the urban area who indicated low confidence. In general, graduate grantees are moderately confident in the delivery of their respective work role as acquired from the obtained education, as indicated by $t = -14.17$. This implies that education has developed a sense of confidence to the graduates as also shown in Table 5.8.

Data on Table 5.10 shows the significance of difficulties encountered, or most likely to be encountered by the graduate grantees in carrying out development work (see Appendix Table 5.10.1). Among the male graduate grantees, only 60% answered that training and education was not relevant to their present work as a difficulty. Female graduate grantees on the other hand, gave a lower percentage rating of 59% on education not relevant as a difficulty. Education and training as not relevant to present work ranked fourth (4th) among other identified difficulties. Other difficulties encountered ranked first, with a mean value of 1.44 and 1.25 for female and male respectively.

Table 5.10
Significance of difficulties encountered or most likely to be encountered
in carrying out development work

Criteria	Gender		Locality		Arithmetic Mean	t-test
	Female	Male	Rural	Urban		
your own time	1.67 (0.69)	1.66 (0.84)	1.61 (0.77)	1.70 (0.85)	1.67 0.81	-13.24****
still insufficient skills	2.83 (1.09)	2.77 (1.03)	2.79 (1.02)	2.81 (1.06)	2.80 1.04	-1.49*
training/ education not relevant with present work	3.20 (1.57)	3.12 (1.23)	3.07 (1.13)	3.18 (1.45)	3.14 1.29	0.81
others	1.44 (1.03)	1.25 (0.45)	1.42 (1.17)	1.30 (0.47)	1.36 10.82	-0.86

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Legend: 1.0 - 1.5 - Very Significant; 1.6 - 2.5 - Significant; 2.6 - 3.5 - Moderately Significant; 3.6 - 4.5 - Less Significant; 4.6 - 5.0 - Not Significant. Criteria were rated from a scale 1-5, from very significant to not significant at all.

Other difficulties which were identified as very important by the graduate grantees include the quality and the insufficiency of facilities; funding support; further advancement in technology; the system or bureaucracy in government offices; too much expected from colleagues; management not supportive of projects; and them not being given the opportunity to share what they had learnt. Training and education obtained from the NZODA Programme ranked fourth, with a representative mean value of 3.20 and 3.16 for female and male graduate grantees. While the issue on skills as still insufficient ranked third, with a mean value of 2.88 and 2.77 for female and male graduate grantees respectively. This result indicate then that the relevance of the obtained education is the least difficulty. Result further indicate that difficulties are

more attributable to the Philippines' level of development. This result means that the education and training learned under the NZODA programme is being used and applied by the graduate grantees. This can be supported by the result on Table 5.5.

Both urban and rural graduate grantees showed that the relevance of obtained education is not as much of a difficulty as the least encountered problem in carrying out development work. This result indicate then that education and training obtained is significantly relevant to their development work. Among the difficulties identified, others both ranked first. It is worth noting also that 100% of the rural graduate grantees answered that their own time is very significant to significant. This is due to the reason that about 64% of those rural graduate grantees are involved in consultancies and/ or research projects, or farming outside of their present work.

Results indicate then that although training and education obtained ranked as the least of a difficulty, insufficiency of skills is still a significant difficulty as indicated by $t = -1.49$. This implies that obtained education is significant in relation to the graduate grantees work (as shown in Table 5.5 and 5.6), but there is still a need to develop more skills among the Filipino graduates. Although education is significantly used and applied by the graduates, there is a need to further introduce more varied skills to the Filipinos.

Overall results are further summarised into developments aspects such as educational, professional and economic as shown in Table 5.11. Data in Table 5.11 shows that although there is a low correlation that exists between obtained education and the graduate grantees' professional, educational and economic development, the correlation is significant at 0.05. On the professional, only 7% of the professional development of the graduate grantees

can be determined by the education under the NZODA programme. Concerning the educational development, only 5% can be determined by the education, while on the economic indices there is almost 10% attributable to education. These percentages are the contributions of obtained education to graduate grantees' professional, educational and economic development. Social development on the whole shows a moderate correlation of 29% to social development. Such results indicate then that graduate grantees development is determined by other factors. On the low correlation with professional development, this supports the idea of general skills (Woodhall, stated in Psacharopoulos 1990), years of experience (Mincer 1974, 1976), and personal characteristics (Becker 1975 and Psacharopoulos 1990). On the educational development, the low but significant correlation can be explained by the fact that grantees of the programme are holders of either one or two degrees. Grantees have acquired and established their own educational qualification prior to the NZODA educational programme. This could be explained also by the fact that Diploma as a programme is not recognised in the Philippines, and it may be recalled that majority of the graduate grantees were awarded Diploma and Certificate/Training. On the economic development, however, the low correlation can be explained by the fact that salary and promotion of work position or designation is heavily determined by the government's budget and availability of vacant positions. Social development, on the other hand, shows a moderately significant correlation that can be explained by the fact that education overseas develop ones' personality, understanding of other cultures, and other social benefits. In general, results supports then the idea of Psacharopolous (1987), that a workers' development is affected by other factors as stated above. In this thesis, such factors will be further discussed in the Conclusion.

Table 5.11
Regression results of NZODA Education and Training
to the development aspects of the graduate grantees

Development Aspects	computed r values	degree of relationship	r square
professional	-0.2709****	low correlation	0.0734
educational	-0.2267***	low correlation	0.0514
economic	0.3131****	low correlation	0.0980
social	0.5413****	moderate correlation	0.2930

Source: Survey results of the NZODA graduate grantees (1996).

Notes : Degree of relationship ranges from : < 0.20 = slight, almost negligible; 0.20-0.40 = low correlation, relationship definite but small; 0.40-0.70 = moderate correlation, substantial relationship; 0.90-1.00 = very high correlation, very dependable relationship (Craft 1990:95). * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$.

CHAPTER SIX

EFFECTIVENESS OF THE NEW ZEALAND OFFICIAL DEVELOPMENT ASSISTANCE EDUCATION AND TRAINING PROGRAMME TO THE PHILIPPINES

Introduction

This chapter presents and evaluates the effectiveness of the New Zealand Official Development Assistance (NZODA) Education and Training Programme to the Philippines. It follows and elaborates on the findings presented in Chapter Five. The survey also reflects the results of Filipino graduate grantees' perception of the programme.

This chapter is divided into three parts: the first, is an examination of the major costs and benefits of the programme; the second, involves the evaluation of the programme's objectives vis-à-vis the Philippines' development; and the third part will focus on the discussion of the rates of return to education in the Philippines. The first part of this chapter aims to determine the effectiveness of the programme by analyzing the identified costs and benefits involved in the NZODA Education and Training. Using the results of such an analysis, it is then possible in the second part of this Chapter to determine the effectiveness of the programme in attaining its objectives. Finally, the third part discusses the social and private rates of returns of the programme for the Philippines.

Costs and Benefits of the Programme

In economics, monetary costs and benefits of the program are very difficult to value, as the direct costs of education and training is paid by the New Zealand government. It should be noted, however, that the programme is costing the Philippines in terms of the salaries being paid to the grantees during the period of study overseas. In general, there are several methods of measuring the costs

Table 6.1
Summary of benefits and costs of the NZODA
Education and Training Programme

Benefits		Costs	
Philippines:			
Graduate Grantees			
1. greater access to higher education particularly to postgraduate course not available at home	62%	1. private costs of living	35%
2. broadened/enriched experience	94%	2. extra income forgone while studying overseas	25%
3. on going contacts and collaboration	34%		
4. increased in income	35%		
Philippine Society			
5. enhanced international understanding	86%	3. may allow desirable domestic returns to be put off	10%
6. productivity increases to a greater degree	68%	4. dependence maybe maintained	25%
		5. may promote inequality	6%
		6. loss output during time overseas	44%
Philippine Government			
7. saved expenditure on higher education	56%	*	
8. enhanced international understanding	72%		
9. productivity increases to a greater degree	57%		
New Zealand Society			
1. revenue from fees and taxation	20%	*	
2. aid allocation tied to New Zealand institutions	46%		
3. reduced unemployment benefits as employment expands	19%		
4. foreign exchange earnings	18%		
5. enhanced international understanding and goodwill	86%		
6. immigration of trained manpower	14%		

Source: Survey results of the NZODA graduate grantees (1996).

Note : *see discussion

and benefits of education (see McMahan and Wagner 1982; Psacharapoulos 1986; Mincer 1972, 1974).

In this thesis, an attempt to evaluate the extent of effectiveness of the programme is based on the perception of the graduate grantees. As there are many benefits, there are also a group of recipients of the benefits, that is, the graduates. They are the most obvious and direct recipients of the programme. The perceptions of the recipients are therefore shown in Table 6.1, as well as a

summary of the benefits gained by the graduate grantees from the NZODA Education and Training Programme. Whilst these benefits are difficult to value, there appears to be a consensus that in general, the enriched experience is substantial (Harris and Jarrett 1990:68). Amongst the identified benefits, the principal benefits to the graduate grantees gained from the programme is the broadened/enriched experience, as represented by almost 94% of the graduates. Perhaps these benefits are also the easiest to interpret in relation to the postgraduate opportunities not available at home. Such benefit is the secondary benefit gained by the graduates; that is, greater access to higher postgraduate education not available in the Philippines, as represented by more than 60% of the graduates. On the other hand, there are less than 40% of the graduate grantees who benefited through gained contacts and developed collaboration with other institutions/people. A number of female graduate grantees (10%), which is about a tenth indicated that they benefit through increased income, while there are more than 25% male graduate grantees who benefited through increased income. Table 6.1 further shows that male and female statistically and significantly differ in proportion on the social and professional benefits, that is, broadened experience and on going contacts and collaboration. This means that generally, there are more male graduate grantees who benefit more on these social and professional benefits. The social and professional benefits gave the male graduate grantees the opportunity to use their learned education, mostly through researches, consultancies and projects.

On the other hand, there were about 23% of the rural graduate grantees who benefited from the NZODA programme by having access to education not available in the Philippines, while there were 39% for the urban graduate grantees. On the other hand, there are 39% rural and 54% urban graduate grantees who benefited from the education through broadened experience. While there were about 16% rural and 19% urban graduate grantees who gained the benefit of having contacts and developed collaboration in New Zealand and in other countries. On the increased income, however, which

ranked as the least among the identified benefits, there were 16% rural and 19% urban graduate grantees who gained the increased income benefit. Locality or place of work of graduate grantees showed no significance difference. This means that there was an equal proportion in the number of urban and rural graduate grantees who gained the same experiences.

Table 6.2
T-test values on graduate grantees' benefits gained from
the NZODA Education and Training programme

Benefits	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
greater access to higher education particularly to postgraduate course not available at home	14	35	-26.58 ***	18	31	-16.46	49
broadened/enriched experience	24	50	-32.91****	31	43	-15.19	74
on going contacts and collaboration	9	18	-11.39	12	15	-3.80	27
increased in income	8	20	-15.19	13	15	-2.53	28

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Significant values are $t = -2.04$ and $t = -2.84$, respectively.

In general, data shows that the principal benefit gained by the graduate grantees is their broadened/enriched experience, as it was indicated by almost all of the respondents. While, the secondary benefit is greater access to postgraduate courses not available in the Philippines, followed by on going contacts and collaboration; and increase in income.

However, there are other indirect beneficiaries of the programme, such as the society, which, in this thesis could be the recipient country-Philippines or the donor country-New Zealand. Benefits contributed to the Philippine society are shown in Table 6.3. Amongst the identified benefits accrued to the Philippine

society, enhanced international understanding ranked first with more than 80% of the graduate grantees' response. This benefit is followed by the perceived benefit of increased productivity of the graduates as a result of the obtained education, as represented by almost two thirds the total respondents. There is a relatively very low difference, as indicated by a percentage difference of -2, on the number of female and male graduate grantees who perceived that Philippines benefited through enhanced international understanding, as represented by 85% and 87% respectively. Benefit through increase in productivity, on the other hand, shows that there is a moderately low percent difference between the female and male graduate grantees as represented by a percent difference of -10. Per cent differences indicate that males are more likely to have a higher perception of the benefits accrued to Philippine society.

Still on the benefit of enhanced international understanding, there is a relatively significant low to moderately low percent difference, as indicated by 13, between the rural and urban graduate grantees. This means that there are more graduate grantees in the rural area who enhanced their international understanding; that is, that the education produced more human resource in the rural areas who have better understanding of international issues. On the other hand, there are more urban graduate grantees who perceived that Philippine society benefits through increased in productivity. Data shows there is a statistically significant difference in the benefit of enhanced international understanding in relation to graduate grantees' locality of work. This indicates then that there are more rural graduate grantees who have enhanced their international understanding. This perhaps could be related to the situation that rural grantees before study overseas have lesser contact with foreign or international agencies, and or institutions. In general, results shows that Philippine society benefited in the education through increases in the number of human resources who have enhanced international understanding and increased productivity to a greater degree. These results support the findings of Harris and Jarrett (1990:72-73) in their study of the benefits of overseas study in Australia.

Table 6.3
Identified benefits to the Philippine society

Benefits Total	Gender		% Difference	Locality		% Difference	
	Female	Male		Rural	Urban		
enhance international understanding	22	46	- 2.17	30	38	12.90*	68
productivity increases to a greater degree	16	38	-10.16	20	34	- 9.40	54

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Significant t-test= 1.66.

Other identified benefits belongs to the Philippine government. These other identified benefits, include enhanced international understanding as indicated by more than two thirds of the graduates' response. This is followed by almost 60% of the graduates with increased productivity to a greater degree and saved expenditure⁴¹ on higher education with less than three fifths of the graduates. Among the graduate grantees, there are 15% more females who indicated their perception saved expenditure for the Philippines on higher education. Whilst there were almost 16% and 21% more male than female who perceived the benefit of enhanced international understanding and increased productivity of employees, respectively. This implies that female graduate grantees are more likely to perceive the benefit of saved expenditure on higher education than male graduate grantees as indicated by a positive percent difference of 14%. In contrast to this, male graduate grantees are more likely to perceive the benefits of enhanced international understanding and increases in productivity of employees as indicated by negative percent differences of almost -16% and - 22% respectively.

Further examination of the benefits by relating them to the locality or place of work of the graduate grantees, Table 6.4 shows these results. Table 6.4 shows that there were almost two thirds of the rural graduate grantees who perceived

⁴¹ Saved expenditure in education by the government refers to the subsidies.

the benefit of enhanced international understanding. This is followed by the perceived benefit on saved expenditure on higher education and increase in productivity of employees as represented by more than four fifths and two thirds of the rural graduate grantees. On the other hand, urban graduate grantees perceived enhanced international understanding (72%) first, followed by increased in productivity of employees (57%) and saved expenditure for the Philippine government on higher education (51%). It is worth noting that there is a relatively low percent difference between the urban and rural workers on the benefit of enhanced international understanding.

Generally, both gender and locality or place of work shows no significant difference on the graduate grantees' perception of the identified benefits accrued to Philippine government. Identified benefits showed that the Philippine government is benefiting from the programme significantly, especially on the dimension of enhanced international understanding. It is worth noting that saved expenditure on higher education was perceived as the third, benefit even although the cost⁴² of education is being paid by the New Zealand government. This means, however, that the Philippines is receiving direct tangible benefits from the programme, not only on the saved expenditure front but on others as well.

Table 6.4
Identified benefits to the Philippine government

Benefits	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
saved expenditure on higher education	17	27	14.44	20	24	11.44	44
enhanced international understanding	16	41	-15.82	23	34	-0.46	57
productivity increases to a greater degree	11	34	-21.84	18	27	-1.20	45

Source: Survey results of the NZODA graduate grantees (1996)

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Statistical t-test results show no significant values.

⁴² Cost here excludes other expenses not paid by the MFAT such as salaries paid to the grantees during period of study by Philippine institutions and income forgone.

As the Philippines-the recipient country is benefiting directly from the programme, the donor country-New Zealand has benefits also. Benefits to New Zealand, however, are very difficult to measure and identify. This thesis presents the identified benefits accruing to New Zealand in general, based on the perception of the direct recipients of the programme-the graduate grantees. Table 6.5 shows that female graduate grantees' most perceived benefit accruing to New Zealand is that of enhanced international understanding and goodwill, as represented by more than four fifths of the total female graduate grantees. This is followed by the benefit gained through aid allocation tied to New Zealand institutions (46%);

Table 6.5
Identified benefits to New Zealand society

Benefits	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
revenue from fees and taxation	3	13	-12.99	9	7	13.24	16
aid allocation tied to New Zealand institutions	12	24	0.87	15	21	2.20	36
reduced unemployment benefits as employment expands	10	5	29.03	8	7	10.11	15
foreign exchange earnings	4	10	-3.49	5	9	-3.52	14
enhanced international understanding and goodwill	22	46	-2.17	27	41	-2.85	68
immigration of trained humanpower	4	7	2.17	7	4	13.37	11

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Statistical t-test shows no significant differences between the gender and between the locality of work of graduate grantees.

reduced unemployment benefits as employment expands (29%); foreign exchange earnings (15%); revenue from fees and taxation (12%); and

immigration of trained humanpower (15%). Male graduate grantees, on the other hand, gave the following order of identified benefits accruing to New Zealand government: enhanced international understanding and goodwill (87%); followed by aid allocation tied to New Zealand institutions (42%); revenue from fees and taxation (25%); foreign exchange earnings (19%); immigration of trained humanpower (13%); and reduced unemployment benefits as employment expands (9%). Percentage differences on the number of female and male graduate grantees perception on the benefits show that there is a moderate difference in the number of graduate grantees on the benefit on reduced unemployment as employment expands, as indicated by a 29 percent difference. This indicates that there are 29% more female than male graduate grantees who perceived the benefit of reduced unemployment as employment expands. Results further show that there is almost a negligible percentage difference on the benefit of aid allocation as tied to New Zealand institutions. Data implies that male graduate grantees have identified more benefits accruing to New Zealand society than female graduate grantees.

Data in Table 6.5 shows the distribution of identified benefits accruing to New Zealand government in relation to the graduate grantees' place of work. Data shows that both rural and urban graduate grantees identified enhanced international understanding as the first identified benefit, with a representative percent of 84% and 87% respectively. This is followed by the identified benefit from aid allocation that is tied to the New Zealand institutions, represented by 47% and 45% respectively. Among the rural graduate grantees, the third identified benefit comes from the revenue from fees and taxation (28%); followed by the benefit on reduced unemployment while employment expands as a result of a need to create more jobs to serve the increase in people (25%); immigration of trained humanpower (22%); and foreign exchange earnings (16%). Among the urban graduate grantees, however, identified foreign exchange earnings ranked third, with 19%; followed by the benefits on revenue from fees and taxation and reduced unemployment benefits as employment expands (15% each); and the last identified is the benefit accruing

to New Zealand through immigration of trained humanpower. Percent differences indicate that there are low differences in the order of identified benefits accruing to New Zealand as a result of the NZODA Education and Training programme. Results show that in general, enhanced international understanding and goodwill as a benefit ranked first as indicated by more than four fifths of the total graduate grantees. Since grantees attend their education in New Zealand, the previous benefit is followed by the benefit from the aid allocation that is tied to New Zealand institutions, indicated by more than two fifths of the total graduate grantees' response. This benefit is related to another benefit which is the revenue gained from fees and taxation identified by only about a fifth of the graduate grantees' responses. As a result of the education undertaken in New Zealand institutions, jobs are created, and as employment expands, New Zealand benefits through the unemployment. This was identified by one fifth of the graduates. It is likely that graduate grantees will come back to New Zealand sometime. Therefore, New Zealand benefits from the immigration of trained humanpower as represented by 14% of the total graduate grantees who identified this as a benefit. Philippines suffers from this brain drain, which is further discussed in part three of this chapter, which is a cost to the Philippines. Identified benefits between New Zealand and Philippines show that the former is receiving more benefits than the latter. The number of benefits, however, is not enough as a measure in itself, but what needs to be considered most is the long after effect or the effect of education after a number of years. New Zealand is receiving identified benefits but the benefits are more of immediate benefit, while Philippines' benefits are in the nature of long time benefits, including the intergenerational effect as discussed in Chapter Two. These benefits are further analysed in relation to the costs of the programme to both countries concerned, to Philippines graduate grantees specifically, which are the concern of the next discussions.

The identified costs of the programme on the part of the grantees are shown in Table 6.6. Data in Table 6.6 shows that there are 38% female and 34% male graduate grantees who answered that that the programme cost them extra

private living costs over and above those covered in the stipend they receive for the programme. There are also 15% female and 30% male graduate grantees who answered that they lost extra income while studying. Percent differences in the number of male and female graduate grantees showed that for the male graduate grantees, the programme is more likely to cost them extra income that they have forgone while studying. This extra income comes from their secondary sources of income as explained by the 56% of the graduate grantees who have a secondary source of income. Other sources of income includes consultancies, research projects and project evaluations that are considered outside of their main source of income. On the other hand, there are 19% more rural than urban graduate grantees who answered that the programme cost them some additional private living costs. While, there are only almost 5% more rural than urban graduate grantees who identified the cost of extra income forgone while studying. Percent differences in the number of rural and urban graduate grantees show that rural graduate grantees are more likely to indicate extra private costs and income forgone while studying than the urban graduate grantees. This issue on the extra private costs and income forgone is explained by the comments given by the graduate grantees about the NZODA Education and Training programme, in which the graduate and the present grantees indicated that the stipend is very low (68%). Graduate grantees further indicated that during their study, they needed to ask for extra money from their respective families in the Philippines to support their studies and their living in New Zealand. Interviews with present grantees revealed that they are having difficulty budgeting their stipend. This is the result of the interview conducted with grantees presently studying in varied universities in New Zealand at the time of the writing of this thesis. Some of them have indicated that they have had to ask for monetary support from their families back home. This indicates then that the stipend given by NZODA is quite low. Their stay in New Zealand invariably costs some private or personal expenses on the part of the grantees.

Table 6.6
Costs of the programme to the grantees

Costs	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
extra private costs of living	10	18	4.50	15	13	19.21	28
extra income forgone while studying	4	16	-14.81	9	11	4.73	20

Source: Survey results of the NZODA graduate grantees (1996).

Notes : * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Statistical t-test shows no significant differences in the gender and locality of work of graduate grantees.

Other identified costs of the programme belong to the Philippine society, as shown in Table 6.7. Table 6.7 shows that the programme is costing the Philippines through the loss of output of good employees as indicated by 42% of the female and 45% of the male graduate grantees. This is followed by the issue on dependence; that dependence may be maintained between Philippines and New Zealand (30% female and 23% male); the possibility of an effect that may allow desirable domestic returns to be put off (8% female and 11% male); and as a further result may promote inequality (4% female and 8% male). Percent differences between female and male graduate grantees show that there is a low difference in their perceived costs of the programme to Philippine society. A negative indicator was that male graduate grantees are more likely than female graduate grantees to identify costs to the Philippine society.

Table 6.7 further shows that among the rural and urban graduate grantees, the same order of costs to Philippine society were identified. There are 34% rural and 51% urban graduate grantees who identified the lost output during the period of time the employee was overseas studying. This is followed by identified costs on the possible maintenance of dependence (28% and 23% for rural and urban graduate grantees respectively); the cost that desirable domestic returns may be allowed to be put off (16% rural and 6% urban); and the cost of the possibility of promoting inequality (3% rural and 6% urban).

On the other hand, institutions in the Philippines are more likely to suffer from loss output of their best employees during study overseas. In total, there are 44% of the graduate grantees who identified lost output of employees as the main cost to Philippine society. This is followed by the possible maintenance of dependence between the two countries (25%); and the possible promotion of inequality as the least cost (6%).

Table 6.7
Costs to the Philippine society

Costs	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
may allow desirable domestic returns to be put off	2	6	-3.63	5	3	9.25	8
dependence maybe maintained	8	12	8.13	9	11	4.73	20
may promote inequality	1	4	-3.70	2	3	-3.25	5
loss output during time overseas	11	24	-2.97	11	24	-16.68	35

Source: Survey results of the NZODA graduate grantees (1996).

This identified costs shows that NZODA education and training programme is costing the Philippines so much on the loss of output of the grantee during study overseas. This could further inhibit the possibility of allowing desirable domestic returns to be put off as a result of the delayed productivity on the contribution of the grantee while studying abroad. Other identified costs includes the possibility of maintaining dependence between the Philippines and New Zealand, being the former depending on the latter in terms of new or highly specialized skills needed by the country grantee. Further costs are that the programme may promote inequality, however, in contrary to this, results in Table 6.1 show that the NZODA education and Training programme is not promoting inequality. Perhaps this could be interpreted in relation to the discussion on the trade imbalance between Philippines and New Zealand, as discussed in Chapter Four of this thesis. On the other hand, this could be

rejected and be interpreted in view of the objective of the programme. This could also mean that the NZODA programme through the provision of the scholarship, is not promoting inequality by allowing for both those from low-income backgrounds, and allowing those who are educated and already well-off to further improve their relatively privileged position. This widens the access to higher education and to education that is not available in the recipient country. Given such conflicts in the interpretation of the results of the programme, further examination was done in relation with the programme's purpose, which is the focus of the next section.

On the Effectiveness of the NZODA Education and Training Programme

The effectiveness of the NZODA Education and Training programme were further examined based on the perception of the direct recipients of the programme—the graduate grantees. Criteria on the effectiveness of the programme includes the purpose of the programme; analysed with the identified development sectors in the Philippines in which education and training is perceived to be needed; and its perceived level of effectiveness.

Table 6.8 shows the purpose of the NZODA Education and Training Programme to the Philippines as perceived by the graduate grantees. Data shows that more than four fifths of the total graduate grantees perceived the main objective of the programme to be of a general nature, that is to help improve the economic, political and socio-cultural development of the recipient country—Philippines. This is followed by the more specific purpose of gaining new knowledge, skills and technology which can be used as a tool in the development of the recipient, as indicated by almost two thirds of the graduate grantees' responses. Further, the least perceived purpose of the programme is to receive technical assistance and this was indicated by half of the graduate grantees. Percent differences among graduate grantees show that male graduate grantees are more likely to both perceive and identify the purpose of the programme. On the other hand, the rural graduate grantees are

more likely to identify the purpose of the programme as opposed to the urban graduate employees. On the other hand, percent difference shows that it is only in the identified purpose of the programme to help improve economic, political and socio-cultural development that has been more likely, perceived by more urban graduate grantees than those working in the rural areas. This result indicates then that urban graduate grantees perceived the NZODA Education and Training programme as a general advantage to the Philippines. This is contrary to the always perceived assumption that education and training programme is justified on the basis of the technical assistance received. This result implied then that the programme to the Philippines has a purpose that is of general benefit to the recipient country, the Philippines. Results further implies that rural graduates are more likely than the urban graduates to appreciate and identify the purpose of the programme. Also, the programme has more impact to the male graduate grantees and to those working in the rural community.

Table 6.8
Main purpose of the NZODA education and training programme

Purpose	Gender		% Difference	Locality		% Difference	Total
	Female	Male		Rural	Urban		
to receive technical assistance	12	26	-2.91	16	22	3.19	38
to help improve economic, political and socio-cultural development	21	47	-7.91	27	41	-2.85	68
to gain new knowledge, skills and technology	17	41	-11.97	22	36	8.02	58

Source: Survey results of the NZODA graduate grantees (1996).

Given the perceived purpose of the programme, there is a need to further analyse the results in relation to the development sectors that is perceived to be in need of the said programme. Table 6.9 shows the development sectors in the Philippines wherein education and training is most needed as perceived by the graduate grantees. Sectors were rated from 1.0 as needed very much to 5.0 as not at all a need (see Appendix Table 6.9.1). Data shows that agriculture

ranked first and technology ranked second with a mean value of $x=1.46$ and $x=1.55$ respectively, as the sectors that are in most need of the education and training programme as perceived by female graduate grantees. Among the female graduate grantees, agricultural and technological sectors are followed by, in order of need, the technological sector ($x=1.55$); professional ($x=2.05$); industrial ($x=2.33$); commercial ($x=2.47$); and vocational ($x=3.00$). On the other hand, both technology and agriculture were perceived by the male graduate grantees of the same degree of need, as indicated by mean value of $x=1.54$. This indicates that both male and female perceive that both sectors on agriculture and technology are very much in need of the education and training programmes. This is followed by other development sectors on professional ($x=1.80$) industrial ($x=2.02$) and commercial ($x=2.46$) in which education and training is significantly needed; while vocational sector was seen as in need but not to the same degree ($x=2.61$).

Table 6.9
Identified development sectors in the Philippines where
education and training programme is needed

Development Sector	Gender		Locality		Arithmetic Mean SD
	Female	Male	Rural	Urban	
commercial	2.47	2.46	2.41	2.50	2.47 ****
	1.12 ^b	1.23	1.18	1.21	1.18
professional	2.05	1.80	1.68	2.03	1.93 ****
	1.23	0.91	1.02	1.00	1.07
agricultural	1.46	1.54	1.18	1.75	1.50 ****
	0.67	0.98	0.48	1.03	0.83
technological	1.55	1.54	1.30	1.70	1.54 ****
	0.74	0.78	0.60	0.82	0.76
industrial	2.33	2.02	2.22	2.03	2.18 ****
	1.05	0.97	1.20	0.83	1.01
vocational	3.00	2.61	2.40	2.90	2.80
	1.55	1.26	1.35	1.29	1.41

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^b data in second row are standard deviations, unless otherwise noted. * Significant at $p<0.10$; ** Significant at $p<0.05$; *** Significant at $p<0.025$; **** Significant at $p<0.01$. Criteria were rated according to : 1.0-1.5 - Needed Very Much; 1.6-2.5 - Much Needed; 2.6-3.5 - Needed; 3.6-4.5 - Less Needed 4.6-5.0 - Not at all a Need.

Among the rural and urban graduate grantees, however, rural graduate grantees showed no difference, as they perceived agriculture and technology as the sectors that have high need of the education and training as represented by a mean value of $x=1.18$; this is followed by all other identified development sectors that need education and training to a lesser degree, with mean values that ranges from $x=1.68$ to $x=2.41$. It is worth noting however, that urban graduate grantees have a different perception of the vocational sector as rated on the basis of need of the education and training programmes. In general, agriculture proved to be the sector that needed most of the NZODA Education and training as it ranked first, represented by a mean value of $x=1.50$. This is followed by the sector on technology with $x=1.54$ (needed very much). Industrial sector on the other hand, which is given priority by the Philippine government, ranked only fourth as represented by the arithmetic mean value of $x=2.18$; while vocational sector proves to be the last among the identified sectors ($x=2.80$). Almost all other development sectors are found to be statistically significant in need of the NZODA Education and Training, with the exception of the vocational sector. Further, other development sectors were identified, most of them, however, fall in the major identified sectors discussed above. A question of the graduate grantees' perception of what needs to the Philippines could NZODA Education and Training Programme be further supports the discussion. Among the identified, the following are further specifically identified by the graduates as to where education and training is needed most for further development purposes: educational/professional, agricultural, geothermal energy, environmental resource management, industrial and vocational, population control, social services, research and development, tourism, forestry management, food processing and marginal action workers. These results can be interpreted in relation to the other results. Results show that NZODA Education and Training is answering the perceived need of the country-Philippines, as agriculture and technology are given priority in the courses offered. The commercial sector, however, proves to be not given as much attention as it was indicated by only one graduate grantee.

Perhaps there is a need to increase the number of grantees on commercial course/s. This perhaps could be further explained by the point that there is only one respondent from the private sector, and that the majority of the graduate grantees are working in the government sector which is not a commercial institution or the private sector.

Given the different development sectors, changes brought about by the programme were further examined in relation to the Philippine situation prior to the graduate grantees education and training. Table 6.10 shows the perceived differences on levels of development with respect to Philippine situation as a result of the changes brought about by the programme (see Appendix Table 6.10.1). Changes were rated accordingly to how different they are from what the Philippines had before the programme. In this thesis, changes are interpreted as improvement. Rating ranges from 1.0 as no difference (meaning no changes or improvements) to 4.0 as very much different (so much changes or improvements). A rating of 1.0 further mean that the programme has not contributed at all while a rating of 4.0 is the opposite. Both male and female graduate grantees perceived economic development as somewhat different, as represented by mean values of $x=2.87$ and $x=2.78$ respectively. Skills and technology brought about by the education, however, are perceived by both male and female graduate grantees as moderately different to the Philippine's development, as indicated by mean values of $x=3.04$ and $x=3.00$ respectively. While female graduate grantees perceived social development to be of moderate difference ($x=3.00$), male graduate grantees perceived it to be of somewhat different as represented by $x=2.59$. This indicates then that males perceive lower levels of changes brought about by the programme than female graduate grantees.

Table 6.10
Perceived levels of changes brought about by the programme
in relation to Philippine development

Changes	Gender		Locality		Arithmetic Mean SD
	Female	Male	Rural	Urban	
skills and technology needed by the Philippines	3.04 0.73 ^b	3.00 0.91	3.03 0.86	3.01 0.85	3.02 **** 0.86
social development	3.00 1.13	2.59 0.94	2.81 0.91	2.66 1.09	2.80 **** 1.04
economic development	2.87 0.97	2.78 0.89	2.90 0.87	2.74 0.94	2.83 **** 0.93

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^b data in second row are standard deviations unless otherwise noted. * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Changes were rated from 1.0 as No Difference at All to 5.0 as Very Much Different from Philippine situation. Changes were interpreted according to: 1.0-1.9 - No Difference at All; 2.0-2.9 - Somewhat Different; 3.0-3.9 - Moderately Different; and 4.0-4.9 - Very Much Different. Statistical t-test values are respectively as follows: $t=10.41$; $t=6.53$; $t=7.63$.

On the other hand, both rural and urban graduate grantees perceived that changes brought about by the programme are moderately different ($x=3.03$ and $x=3.01$ respectively) to the development of skills and technology in the Philippines. Both social and economic development are rated as somewhat different as represented by mean values that ranges from $x=2.66$ to $x=2.90$. This result indicates that in general, the changes brought about by the programme have moderately contributed to the development of skills and technology of the recipient country-Philippines, as represented by an arithmetic mean value of $x=3.02$. While, changes have somewhat contributed in social and economic development, as indicated by arithmetic mean values of $x=2.80$ and $x=2.83$ respectively, statistical t-tests show that changes in social and economic development are of a significance somewhat different to the significance of Philippine development. On the other hand, changes in skills and technology is statistically and significantly moderately different. These results imply that the programme has contributed at the moderately significant to the development of skills and technology in the Philippines. In general, the

programme is significantly contributing to some extent to the social and economic development of the Philippines, while it is of a moderate extent of contribution to the development of skills and technology needed by the Philippines.

Given the extent of the contribution of the NZODA education and training in relation to development in the Philippines, the graduate grantees further rated the extent of effectiveness of the programme itself. Table 6.11 shows the perception of the graduate grantees related to the extent of the effectiveness of the NZODA Education and Training Programme. Criteria on the effectiveness was rated from 1.0 as least effective to 5.0 as most effective.

Table 6.11
Perceived extent of effectiveness of the NZODA
Education and Training Programme

Effectiveness	Gender ^c		Locality		Arithmetic Mean
	Female	Male	Rural	Urban	
transfer of skills and technology needed by the Philippines	3.72 0.98 ^b	4.02 0.98	4.03 0.98	3.85 0.98	3.87 ****
improve the Philippine social development	3.44 1.04	3.11 1.12	3.44 0.98	3.07 1.16	3.28 ***
improve the Philippine economic development	3.52 1.05	3.52 1.00	3.60 0.99	3.50 1.10	3.52 ****
improve rural development	3.52 1.08	3.44 1.13	3.55 1.00	3.41 1.18	3.48 ****

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^b data in second row are standard deviations unless otherwise noted. * Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$; **** Significant at $p < 0.01$. Perceived effectiveness was rated from 1.0 as Least effective to 5.0 as Most Effective. Perceived effectiveness was interpreted as: 1.0-1.5 - Least Effective; 1.6-2.5 - Moderately Effective; 2.6-3.5 -Effective; 3.6-4.5 - Very Effective; and 4.6-5.0 - Most Effective.

In general, the transfer of skills and technology ranked first with a mean rating of very effective, represented by $x=3.87$. This is followed by the improvement of the Philippine economy, social and rural development with mean ratings of $x=3.52$, $x=3.48$ and $x=3.28$ respectively. Perception results therefore, show that the NZODA in general is contributing very effectively to the skills and technology, while contributing effectively to the economic, social, and rural development of the recipient country Philippines.

Social and Private Benefits to Education in the Philippines

Benefits were classified into social and private and were further associated with key characteristics of the graduate grantees, as well as their educational and social/professional factors. Table 6.12 shows that age, highest educational qualification before the NZODA education, length of schooling under NZODA, working experience, length of serviceable years, locality of work and programme of study finished under NZODA programme are statistically significant at at least $p<0.15$. Among the characteristics, age shows a positively substantial association with social benefit ($r=0.329$) while age shows a relatively small and negative association ($r=-0.152$) with the private benefits. Highest educational qualification before the NZODA programme is positively associated with private benefit ($r=0.212$) and length of schooling under NZODA ($r=0.243$), while these characteristics do not show any significant association with the social benefit. While the number of years of working experience has a positively significant association with the social benefit ($r=0.329$), length of serviceable years and locality of work have a relatively negative association ($r=-0.329$ and $r=-0.176$ respectively); such characteristics are significant only to private returns at $p<0.15$. It is worth noting also that working experience is positively associated with the social benefit of education while it is negatively associated with the private benefit. On the other hand, length of serviceable years is negatively associated with social return and positively associated with private benefit. Locality of work indicate that it is negatively associated with social and private benefits.

On the educational variables, programme of study obtained under the NZODA programme is significantly and positively associated with social and private benefits. This indicates then that NZODA education is significantly contributing to the Philippine development, not only with the increased in number of highly skilled employees but on the private and social benefits accruing to Philippines in general. Social/professional variables proved to be not associated with the social and private benefits. This implies that values, attitudes and professional mobility of graduate grantees is not associated with social and private benefits. This could perhaps be explained by the fact that grantees have already acquired a set of values, attitudes, educational qualification, and other attributes before the NZODA education and training was granted to them.

Table 6.12
**Association between social and private benefits with key characteristics,
 educational and social/professional factors**

Estimate	Benefits	
	Social Parameter Estimate	Private Parameter
Characteristics		
Gender	0.145	0.134
Age	0.329****	-0.152+
Highest educational qualification before NZODA Prog.	0.013	0.212*
Highest educational qualification after NZODA Prog.	-0.131	0.043
Length of schooling under NZODA	0.141	0.243**
Working Experience	0.329****	-0.152+
Length of Serviceable Years	-0.329****	0.152+
Locality of Work	-0.176+	-0.152+
Type of employer (private/gov't)	0.048	0.041
Educational		
Programme of study	0.383****	0.333****
Continue schooling after finished NZODA Prog.	-0.131	0.043
Social/professional		
Changed in work position or designation after NZODA	-0.092	-0.079
Relation of obtained education with present work	-0.068	-0.035
Extent of association between NZODA education and work	0.04581	0.035

Source: Survey results of the NZODA graduate grantees (1996).

Notes : +Significant at $p < 0.15$; *Significant at $p < 0.10$; ** Significant at $p < 0.05$;
 Significant at $p < 0.025$; *Significant at $p < 0.01$;

Rates of Return to Education in the Philippines

The data for estimates of the rates of return to education come from the survey of 1989 to 1995 graduate grantees of the NZODA Education and Training programme to the Philippines. The estimates use the respondents as the sample as the concerned respondents in this thesis are assumed to be as a special human resource investment of educational aid programmes. To ensure a close link as possible between education and income, only grantees that are considered head of the family reported to be main income generator for his/her family were selected for analysis. The income variable here is defined to include income from salaries and wages, income from entrepreneurial activities and family sustenance activities. Income from other sources such as from assets is excluded because it is related more to personal or inherited fortune than to educational attainment.

Out of a total 79 graduate grantees-respondents, the head of the family selection and the exclusion of a few extreme outliers⁴³ resulted in a sample of 47 graduate grantees. This data was used to estimate the Mincerian earning function⁴⁴ in calculating the rate of return in an elaborate method.

Results using the Mincerian estimate show that an additional year of schooling at the sample mean yields a private return of 8.99% and a social return of 8.6%, not corroborating with the Paqueo (1986) estimate. Although results are not the same, it implies that obtained education under NZODA programme is contributing significantly to Philippine development. This results further imply that expanding investment in aid education to the Philippines is as economically profitable and effective as in other developing countries. As is

⁴³ Graduate grantees with salaries more than 25,000 pesos (Philippine monetary unit), which is the monthly salary of the Philippine President Fidel V. Ramos) are excluded in the analysis for the reason that most of the graduate grantees are working in the government. Graduate grantees that are working in a government owned corporation like PNOOC are also excluded as the salary scheme is very different.

⁴⁴ $\ln Y = \alpha + \beta_1 X^1 + \beta_2 X^2 + \beta_3 X^3$; where $\ln Y$ is the logarithm of the earnings income, α is the intercept, $\beta_1 X^1$ is the year of schooling, $\beta_2 X^2$ is the year of working experience, and $\beta_3 X^3$ is the length of working life (Mincer 1974).

well known, however, the Mincerian function provides only an approximate estimate since it ignores the direct costs of schooling. Accordingly, estimates were further done using least square method and regression analysis. These statistical tests were used to measure and to show the degree of relationship between variables, and likely trends or predictions. The results are shown in Table 6.13.

Results show that if the educational qualification of grantee is increased by 10%, then was private return to education will increase by P1,400.00 (in a month). Locality of work implied that rural graduate grantees have P1,894.00 less monthly private return than urban graduates. A one per cent (1%) increase in the programme of study under NZODA on the other hand shows a P2,060.00 and P2,980.00 increase in the monthly private and social returns to Philippines. Results further show that other variables are not significant estimates. Other factors that could be affecting the social and private return factors that could be affecting the social and private return could be attributable to the general mandatory salary scheme of the government. The Philippines' salary scheme is not so effective, in that at the time of the writing of this thesis the government is already implementing its changed salary scheme.

In summary, although it is difficult and it is a big question for a developed country to sponsor an investment in a developing country on higher education in the form of scholarships, aid education to the Philippines given by the New Zealand government and undertaken also in New Zealand is effectively contributing to the social and economic development of the Philippines.

Table 6.13
Update estimates of returns to education in the Philippines

Estimate	Benefits	
	Social Parameter Estimate	Private Parameter
Intercept	3.67E+09 (0.000421)	-1.5E+09 (-0.00017)
Characteristics		
Gender	8298.20 (0.471668)	-156412 (-0.89413)
Age	1.84E+08 (0.000958)	-7.4E+07 (-0.00039)
Highest educational qualification before NZODA Prog.	-5519.88 (-0.04385)	236656.8 (1.890807)**
Highest educational qualification after NZODA Prog.	-18172.1 (-0.17888)	-4139.95 (-0.04099)
Length of schooling under NZODA	-1.6E+09 (-0.53919)	6.5E+08 (0.218694)
Working Experience	-3.5E+08 (-0.00109)	1.43E+08 (0.000441)
Length of Serviceable Years	-1.7E+08 (-0.00082)	68931447 (0.000333)
Locality of Work	-175874 (-1.01609)	-320098 (-1.86003)**
Type of employer (private/gov't)	-67902.1 (-0.12449)	-384368 (-0.70876)
Educational		
Programme of study	503771.7 (2.582754)****	348170.8 (1.795352)**
Continue schooling after finished NZODA Prog.	-102521 (-0.69956)	-106614 (-0.7317)
Social/professional		
Changed in work position or designation after NZODA	-7833.96 (-0.02676)	-71947 (-0.2472)
Relation of obtained education with present work	-43003.3 (-0.16092)	135626.3 (0.510463)
Extent of association between NZODA education and work	34790.87 (0.39404)	-19264.9 (-0.21946)

Source: Survey results of the NZODA graduate grantees (1996).

Notes : ^c Values in parenthesis are t-test values. *Significant at p<0.10; **Significant at p<0.05; ***Significant at p<0.025; ****Significant at p<0.01.

SUMMARY, CONCLUSION AND RECOMMENDATION

Investment in education is a key element of the development process (Psacharapolous and Woodhall 1985). Its importance is reflected in the growing recognition since the 1960s that investing in both formal and informal education and training provides and enhances the skills, knowledge, attitudes and motivations of an individual necessary for economic and social development. For many decades now, NGO's, Bilateral and Multilateral have been engaged in providing educational aid assistance programmes to many developing countries in the hope that graduates will be able to contribute to the development of their home country by sharing their learned skills, knowledge, attitudes and motivations. The design and policies of such programmes is seriously taken into consideration by both donor and recipient so that the maximum contribution of educational aid to a country's development effort can be gained.

This thesis determined the contribution of educational aid assistance to economic and social development in general. Specifically, this thesis examined the actual results and the effectiveness of the NZODA Education and Training Programme for the Philippines. The data in this thesis revealed several results that have important policy implications for educational aid policy, especially in developing countries. Results included measuring both social and private benefits and costs which accrued to the Philippines and New Zealand; while an update on the rates of return to education was also calculated.

The principal benefit for the recipient country-the Philippines, of grantees who studied in New Zealand under the New Zealand Official Development Assistance (NZODA) Education and Training Programme was in relation to the broadened/enriched experience of the graduate grantees. The second

principal benefit for the recipient country was the greater access to higher education particularly to postgraduate courses not available at home without the monetary costs that is having a direct impact on the government budget as well as the individual student or the grantee.

In terms of costs, the services or output of NZODA grantees, however, are lost on the part of the recipient country during the period of study overseas. Further, this lost output may be permanent if the grantees do not return. Results from the survey showed that students are more likely to stay and work in the country in which education was finished or migrate to another developed country while the country of birth may still benefit from remittances abroad. It has also been assumed that a better educated workforce will be more productive, so that the GNP and other macroeconomics aggregates will increase as more educated graduates are produced.

While the Philippines, like most other developing countries, have some undergraduate training facilities, specialised postgraduate work is limited and access to some developed countries' education like New Zealand is therefore valuable and necessary.

The most important benefits accrue to the direct recipient, the grantees. The period of study overseas has built maturity, experience, confidence and established contacts which will prove useful long after NZODA grantees have returned home. These then, are some of the many benefits including more important benefits like the techniques, procedures and information assimilated by the grantees.

This study further looked at the issue of the relevance of NZODA higher education or training programs for the Philippines. Weiler (1988) has

expressed a view that much postgraduate research in the USA has little value, even to the overseas students, other than its part in acquiring a higher degree:

graduate training in American universities in such fields as education, public administration and management, industrial engineering, economics and most of the other social sciences is based on a body of research and predicated upon a set of corresponding paradigms which are not necessarily applicable or relevant to the social economic and political reality of an underdeveloped country.

(Weiler, quoted by Welch 1988:393)

As Harris and Jarrett (1990:74) commented, this is a very sensitive question and includes consideration of whether the overseas students study to learn techniques and procedures or to acquire information; whether the equipment upon which the research was based is available in the grantees' home country; and whether the postgraduate training could not have been more effectively carried out by the grantee continuing to work at home but with the provision of supervision in some form from a donor country like New Zealand.

From the survey it was also concluded that the programme increased equality by including students from low income backgrounds, but on the other hand increased inequality by including only the educated to further improve their relatively privileged position; and provided education or training which is to some extent is irrelevant to some of the needs of the country, as indicated by some grantees. Graduate grantees have been more productive as a result of the obtained education. However, earnings or income does not reflect productivity of the graduates. Income has in the past been more affected by the salary scheme of the government, which at the time of the writing of this thesis is being changed, with the hope that productivity will be more important in determining salary increases.

It is worth noting that the NZODA programme is answering the agricultural and technological needs of the Philippines. Further, that National Economic Development Authority in the Philippines is able to determine sectors that needs educational development and the education and training provided by New Zealand is of moderately high relevance to the needs of the Philippines, as reflected in the courses of students finished under the programme. Further, NZODA educational aid has given government and society increased access to better qualified staff who had been trained abroad. At the societal level, there is a continued dependence on the developed world, largely in the form of Western values, and the potential for subsequent brain drain.

On the costs and benefits to New Zealand, it should be noted first that expenditure occurs in respect of the grantees whose tuition fees are paid out of New Zealand's aid budget. Since aid funds should otherwise have been largely spent overseas, rather than in New Zealand as fees, there is an impact on the level of economic activity in New Zealand. In such cases, there is an injection of expenditure into the domestic economy. The New Zealand government, however, benefits from sponsoring overseas students' education in New Zealand because part of the aid budget is tied up in a very direct way. Further, as an off-shoot of the sponsored education under the aid programme, grantees may encourage fee paying overseas students to undertake education in New Zealand. Other additional identified benefits for New Zealand are enhanced international understanding and goodwill; enhanced future trade through former grantees (students) may exhibit preference for New Zealand made commodities, thus expansion of import of New Zealand goods; and enriched educational experience on the part of the New Zealand students. In general, it can be said that the issue of the net economic effect on New Zealand of the overseas students' education in New Zealand is much too large an issue for

detailed consideration in this thesis and therefore has only been briefly mentioned.

Other benefits are more direct and belong to New Zealand institutions. Such benefits include the revenue gained from the payment of fees and enriched educational experience for New Zealand students. The research output of overseas students may also prove beneficial to New Zealand. However, such benefits do not apparently apply to some researches such as in social sciences in which the usual focus of the researches is related to the grantees' home country.

Another benefit for New Zealand is the possible immigration of the grantees to New Zealand, but this is also a loss on the part of the recipient country-Philippines. The brain drain of skilled people who were formerly overseas students to New Zealand has a positive impact to New Zealand but is considered as a cost on the part of the Philippines. The question of granting permanent residence to overseas students is a difficult question, as some overseas students see that study opportunities in New Zealand could be a pathway to permanent residence. Results of the study shows that immigration procedures or perhaps government policies with respect to immigration and the granting of resident status to overseas students is likely to be a little loose, as many students were allowed not to come back to the Philippines and are residing in New Zealand.

In conclusion, the New Zealand Official Development Assistance Education and Training Programme for the Philippines has several unique features. The programme has produced an unequal number of male and female skilled graduates in a ratio of 2 males to 1 female. Rural-urban place of work of graduate grantees has not been fairly divided, although inequality is at about

8% difference only. Private and government institutions are not equally given the opportunity of access in NZODA education and training, as majority of the graduate grantees belong to the government or government owned institutions. In this context, it is not surprising that the returns to education does not differ markedly from those found in most other advanced countries.

The updated estimates for 1996 NZODA graduates show that despite inequalities in gender, locality of work and type of institutions, the rates of returns to education have increased. As it is comparable with those typical of other developing countries and advanced countries, they are nevertheless high enough to suggest that modest expansion of educational aid in the Philippines would be profitable for both the Philippines and New Zealand.

Still on the effectiveness, New Zealand educational aid programme is being conducted and delivered within the context of its aid objectives. In general, overseas students who were educated in New Zealand do assist in achieving a greater understanding of New Zealand institutions and values, thus enhances international understanding. A more important point, however is that although the programme is relevant and effective and has resulted in opportunities and improved qualities of the graduates, the programme faces some constraints. Given the quality of the graduate grantees, the majority of them seek greener pastures; that eventually defeats the purpose of the educational aid (which is the possibility of sharing learned education, which may further influence other people). There are also constraints to the opportunities of sharing what they have learned or influencing other people. The government lacks *plantilla*, a list of positions that may place the graduate in a better position where he/she can use and share what has been learned, for example. Perhaps another constraint is the fact that in the Philippines, most of the higher and middle managers are appointed by the President of the Philippines or by the higher government

officials. In this sense, therefore, graduates become victims of the whims and caprices of the government officials. This constraint is related with the "crab mentality"; in that sometimes, the management pulls down the graduate specially if he/she becomes a threat to them. Such constraints are coupled with low personnel movement; that is, demotions are more often than promotions. Constraints mentioned above are directly related to the culture of an institution. Other constraints to the application of learned education is on lack of facilities, resources, or budgetary allocations. Further, the Diploma as a programme is not recognised in the Philippines. In conclusion, it is worth noting that these benefits are directly related to the culture of an organisation, which is commonly present in a developing country. Other constraints that are present in developing countries and are present also in the Philippines is the inadequacy of facilities or resources, which is due to some budgetary allocations.

Programmes will be more effective if graduate grantees were obliged to serve their home country first before going overseas again, for example. A close coordination perhaps is required between the nominating agency and the Civil Service Commission in the Philippines for a better position upon coming back. Other recommendations include a need to improve the division of the grantees into a more equitable rural-urban, male-female, and private-government institutions. In this context, the government nominating body in the Philippines may consider improving the availability of scholarship grants to the private institutions, female employees and to those working in the rural areas. For the NZODA Education and Training Programme to the Philippines to be more effective, it should encourage alternative forms of delivery of New Zealand's educational aid, perhaps twinning arrangements or collaborations with overseas institutions, or perhaps an evaluation of the effectiveness of the delivery of the programme itself, which may lessen the possibility of a brain drain. The

programme should improve the equitable distribution of overseas students within New Zealand institutions and across courses.

In the utilisation of education and training, there is a need for training, certificate or diploma programme of longer duration, to ensure good performance. Perhaps the training should be in degree programmes or in intensive apprenticeships and internships. It might be worth training or educating people under a degree programme as different from the Diploma Programmes. Further, it might also be worth educating fewer people who can later on effectively train or educate their other countrymen. More training or degree programmes can perhaps be conducted within the recipient countries.

The effectiveness and efficiency of NZODA Education and Training Programme or of any educational aid programme depends on the ability of both the donor and the recipient countries to formulate an appropriate policy and establish an appropriate structure or framework within which foreign investments can fruitfully operate. Since the Philippine Special Committee on Scholarships is the designated Philippine official coordinating agency for educational aid programmes, it must assert its function as a coordinating and administering agency for educational aid programmes. However, in the implementation of policies, flexibility should be considered, in as much as there are institutions endowed with genuine motivation in the utilisation of assistance such as school foundations and non-government organisations.

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Appendix A

Table A.1
Distribution of graduate grantees

	number of grantees	(%)
Total number of recorded grantees (MFAT)	177	-
Total number of recorded grantees (SCS)	165	-
Number of grantees who cannot be traced anymore	21	21%
Number of grantees who did not return	24	30%
Number of grantees confirmed staying in New Zealand	9	11%
Number of grantees who responded to the questionnaire	79	64%

Sources: Survey results of graduate grantees (1996). Mafta and SCS documents.

Appendix B

GUIDING PRINCIPLES

Partners responsibility

New Zealand recognises that development will be achieved primarily through the policies and efforts of the governments and peoples of partner countries themselves. New Zealand will respond to their priorities and needs where these are consistent with the principles underlying NZODA and where it has the expertise and capacity to do so.

Building capacity

NZODA enhances the capacity of countries with limited resources or opportunities to participate in the global economy and the capacity of people to participate fully in their societies. NZODA concentrates on human resource development and institutional strengthening.

Sustainability

NZODA support activities which contribute to lasting improvements in the economic, social and political conditions of men, women and children in developing countries. This means support for economic strategies which are equitable, maintain the natural resource base and the quality of the environment and provide the greatest level of self reliance possible.

Reducing Poverty

A primary focus of NZODA is to enhance social cohesion by enlarging the economic and social choices of men and women. This includes efforts to increase the self reliance and standard of living of disadvantaged groups through improving their access to and control over resources.

Participation

New Zealand is committed to greater participation of all people, especially disadvantaged groups, in economic, social and political life. This is achieved through wide consultation with active involvement of men and women, communities and relevant organisations in all development assistance activities.

Involving the New Zealand community

The NZODA programme encourages the involvement of all sectors of New Zealand society in its international development cooperation effort including suppliers of goods and services in the private sector, educational institutions, non-governmental organisations, ethnic communities, and government agencies. Maori have a special contribution to make.

Source: NZODA Programme Profiles 1996/1997 of the Development Cooperation Division of the Ministry of Foreign Affairs and Trade, Wellington, New Zealand.

Appendix C

Table 5.6.1
Frequency distribution on Education and change in income

	Change in Income		% Difference	Total	% Difference
	With Increase due	not due			
Gender					
Female	8 (42.11)	11 (57.89)	-15.78	7 (26.92)	26 46.16
Male	20 (44.44)	25 (55.56)	-11.12	8 (15.09)	53 69.82
Locality					
Rural	12 (56.52)	11 (43.48)	13.34	9 (25.00)	32 46.88
Urban	14 (36.59)	16 (63.41)	-23.41	6 (12.77)	47 19.14
Total	28 (43.75)	36 (56.25)	-12.50	14 (17.22)	79 63.29

Source: Survey results of the NZODA graduate grantees (1996)

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

AppendixD

Table 5.7.1
Frequency distribution on change in work position
or designation after the education

	Change in work position/designation			Total	% Difference
	With Promotion due	% Difference	No Promotion		
Gender					
Female	8 (57.14)	6 (42.86)	14.28	12 (46.15)	26 7.7
Male	22 (78.57)	6 (52.83)	57.14	25 (47.17)	53 5.7
Locality					
Rural	16 (84.21)	3 (15.79)	68.42	13 (40.63)	32 18.8
Urban	14 (60.87)	9 (39.13)	21.74	24 (51.06)	47 -2.12
Total	30 (71.43)	12 (28.57)	42.86	37 (46.84)	79 6.32

Source: Survey results of the NZODA graduate grantees (1996)

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$;

**** Significant at $p < 0.01$.

Appendix E

Table 5.11.1
Grantees' benefits gained from the programme

Benefits	Gender		% Difference	Locality		% Difference	Total	Rank
	Female	Male		Rural	Urban			
greater access to higher education particularly to postgraduate course not available at home	14	35	-27.08	18	31	-16.46	49	2
broadened experience	24	50	-32.91	31	43	-15.19	74	1
on going contacts and collaboration	9	18	-11.39	12	15	- 3.80	27	4
increased in income	8	20	-15.19	13	15	- 2.53	28	3

Source: Survey results of the NZODA graduate grantees (1996)

Notes : ^a data in parenthesis are values in percentages unless otherwise noted.

* Significant at $p < 0.10$; ** Significant at $p < 0.05$; *** Significant at $p < 0.025$;

**** Significant at $p < 0.01$.

25th March 1996

Dear NZODA Graduate Grantees,

Hello and good day!

I, Miss Ninia P. Inoncillo, a MPhil in Development Studies candidate at Massey University, is doing my thesis entitled "Effectiveness and Outcomes of the New Zealand Official Development Assistance (NZODA) Study Awards Programme in the Philippines." It would be a great help on my part if you can accomplish the questionnaire and send it back to me using the postage paid envelope. Any information or answer to the questions will be treated confidential. The study, in general will improve the NZODA Study Awards Programme to the Philippines.

Please take note that all students who studied in New Zealand from 1988 belong to the NZODA programme. This includes whether you were previously under the Colombo or MERT programme, as long as you were enrolled by the year mentioned you are under the NZODA programme.

Furthermore, I would like to take the opportunity to ask whether you are interested in having an Association of all the NZODA Ex- Grantees and other ex-grantees such as Colombo. If so, please complete the form at the end of the survey questionnaire.

Thank you so much for your cooperation in advance, I remain

Miss Ninia P. Inoncillo

2. What can you say about the relation between your education and your work? Encircle the number corresponding to your answer.

Highly related					No relation
1	2	3	4	5	

2.1 Why?

3. After finishing the programme, were you able to use what you have learned?

Yes

No

3.1 If Yes, In what field of work/ outside work/ work-related activities?

3.2 If No, Why not? What reasons do you think why?

4. Did your annual income from employment change two years after finishing the Study Awards programme?

Yes

No

If No, please proceed to question no. 4.2.

4.1 Is/Are the reason/s in the change due to the programme?

Yes

No

4.1.1 If No, What could be reason/s that affected the change?

4.2 Why do you think there was no change?

5. Were you promoted to a different position after your completion of the Study Award?

Yes

No

If No, Please proceed to question no. 5.3

5.1 Is the promotion due the educational qualification you benefited from the programme?

Yes

No

5.2 Do you think you will be given the same position even without the educational qualification due to the programme? Why do you think so?

Yes

No

5.3 If No, Why do you think so?

6. What are your five (5) most important accomplishments after the programme? (Please state from the most important to the least important.) Opposite your accomplishments, please indicate its degree of relatedness to your skills and technologies learned from the programme by CIRCLING the number. -

Accomplishments	Relatedness				
	Very Related				Least Related
<hr/>	1	2	3	4	5
<hr/>	1	2	3	4	5
<hr/>	1	2	3	4	5
<hr/>	1	2	3	4	5
<hr/>	1	2	3	4	5

7. Do you wish to, or Have you already carried out productive development work on your office/department/institution? (Please tick the appropriate answer.).

7.1 already developed

7.2 wish to develop

7.3 some development you wish to develop further

7.4 do not wish to develop at all

For questions number 8 - 9, please answer the questions by CIRCLING the corresponding number to your answer.

8. Are you confident in your work role in your institution/ department/ office?

Yes

No

If No, please proceed to question no. 8.2.

8.1 If Yes, to what extent?

Very confident

Less confident

 1 2 3 4 5

8.2 If No, Why not?

9. Indicate the significance of the following difficulties you might have faced, or think you are likely to face in carrying out development work.

	Very Important			Not Important	
	1	2	3	4	5
9.1 your own time	1	2	3	4	5
9.2 still insufficient skills	1	2	3	4	5
9.3 training/education not relevant with work	1	2	3	4	5
9.4 others (please specify) _____	1	2	3	4	5

10. What, if any, have been the problems you have encountered associated with your technological knowledge? Please list these in order of importance and where possible describe briefly how you have, or intend to overcome these problems.

B. On the Costs and Benefits:

1. What, if any, are the benefits you gained from the Study Awards Programme? Tick the box according to your answers.

1.1 greater access to higher education, particularly to postgraduate course not available at home

1.2 broadened experience

1.3 on going contacts and collaboration

1.4 others, please specify _____

Comments:

2. What, if any, benefits have it contributed to the Philippine society in general?

- 2.1 enhanced international understanding
- 2.2 productivity increases to a greater degree
- 2.3 others, please specify_____

Comments:

3. What, if any, benefits have it contributed to the Philippine government?

- 3.1 saved expenditure on higher education
- 3.2 enhanced international understanding
- 3.3 productivity increases to a greater degree
- 3.4 others, please specify_____

Comments:

4. What, if any, benefits have it contributed to the New Zealand government?

- 20.3.1 revenue from fees and taxation
- 20.3.2. aid allocation tied to New Zealand institutions
- 20.3.3 reduced unemployment benefits as employment expands
- 20.3.4 foreign exchange earnings
- 20.3.5 enhanced international understanding and goodwill
- 20.3.6 immigration of trained manpower
- 20.3.7 others, please specify_____

Comments:

5. What, if any, were the costs of the Study Awards Programme (including nonmonetary) on your part?

- 5.1 extra private costs of living
- 5.2 income forgone while studying
- 5.3 others, please specify_____

6. What, if any, are the costs to the Philippine society?

- 6.1 may allow desirable domestic reforms to be put off
- 6.2 dependence maybe maintained
- 6.3 may promote inequality
- 6.4 loss of foreign exchange may worsen balance of payments

6.5 loss output during time overseas

6.6 others, please specify: _____

C. On the Study Awards Programme:

1. What do you think is the main purpose of the New Zealand Official Development Assistance Study Awards Programme? Check as many purposes you think.

1.1 to receive technical assistance

1.2 to help improve economic, political and socio-cultural

1.3 to gain new knowledge, skills and technology

1.4 others, please specify: _____

2. In what business/industrial sector of the Philippine development is the Study Awards needed most? Rate the following by CIRCLING the numbers according to their importance or need by using the scale below.

	Needed Very Much			Not at All a Need	
2.1 commercial	1	2	3	4	5
2.2 professional	1	2	3	4	5
2.3 agricultural	1	2	3	4	5
2.4 technological	1	2	3	4	5
2.5 industrial	1	2	3	4	5
2.6 vocational	1	2	3	4	5
2.7 others, pls. specify _____	1	2	3	4	5

3. In your own opinion, what needs of the Philippines could NZODA Study Awards be of great help? Please discuss briefly.

4. As for the changes brought about by the Study Awards, do you think the changes would be the same even without the educational assistance programme? How would rate the difference in change, if there's any?

	No Difference	Somewhat Different	Moderately Different	Very Much Different
4.1 skills and technology needed by the Philippines	_____	_____	_____	_____
4.2 social development	_____	_____	_____	_____

4.3 economic development _____
 4.4 others (please specify) _____

5. As an over-all evaluation of the programme, please indicate your perception on the extent of effectiveness of the New Zealand Official Development Assistance Study Awards Programme on the following by CIRCLING the number accordingly.

	Least Effective				Most Effective
5.1 transfer of skills and technology needed by the Philippines	1	2	3	4	5
5.2 improve the social development of the Philippines	1	2	3	4	5
5.3 improve the economic development of the Philippines	1	2	3	4	5
5.4 improve rural development	1	2	3	4	5

6. If you were to be given another chance, will you:

6.1 accept the same NZODA Study Award? Why?/Why not?

Yes

No

6.2 study the same course? Why?/Why not?

Yes

No

6.3 study in the same school? Why?/Why not?

Yes

No

7. Any comment/s on the NZODA Study Awards Programme:

8. If for some reasons I want to clarify any of the informations you have given, may I contact you again?

Yes

No

OPTIONAL

Name: _____

Contact Address: _____

Telephone No. : _____

I am interested in having an association.

No, I am not interested in having an association.

Suggestions/ Comments you want to give regarding the association:

Thank you for your participation.

Please return immediately either by mailing the questionnaire back using the postage - paid envelope or by phoning Ninia at (02) 731-31-17/ 731-31-01 loc. 314 (office) or 918-820-6335/ (02) 712-71-97 (home). Just in case, please leave your name/phone number /or messages.