Australian Agency for International Development



PNG cluster evaluation of three institutional strengthening projects



Evaluation No: 3 - May 1998

Australian Agency for International Development



PNG cluster evaluation of three institutional strengthening projects

Evaluation No: 3 - May 1998

PNG Cluster Evaluation of Three Institutional Strengthening Projects Evaluation No: 3 May 1998

ISBN 0 642 22004 2 ISSN 1030-7249 © Commonwealth of Australia 1998

> This review was undertaken by AusAID staff and external consultants. It does not necessarily represent Australian government policy Printed by CPN Canberra 1998

Contents

Acknowledgements
Acronyms and Abbreviations vi
1 Executive Summary 1
2 Introduction
3 Background to Projects: General 12
3.1 Development Context of the Projects 12
4 PNG Tax Office Institutional Development Project 14
4.1 Project Overview
4.1.1 Development context
4.1.2 Description of the project
4.1.3 Situation at the end of the project
4.2 Outcomes
4.2.1 Technical Outcomes
4.2.2 Financial Outcomes
4.2.3 Economic Outcomes
4.2.4 Institutional Outcomes
4.2.5 Outcomes for Women
4.2.6 Performance of Management
4.2.7Benefit cost analysis
4.3 Sustainability
4.4 Assessments of Strengths and Weaknesses
4.5 Lessons Learned
5 Bureau of Customs and
Excise Institutional Development Project
5.1 Background
5.1.1 Development context
5.1.2 Description of project
5.1.3 Situation at end of Project
5.2 Outcomes
5.2.1 Financial Outcomes 40
5.2.2 Economic Outcomes 41
5.2.3 Institutional Outcomes 41
5.2.4 Outcomes for women
5.2.5 Performance of management 41

5.2.6 Benefit cost analysis				
5.3 Sustainability				
5.4 Assessment	5.4 Assessments of Strengths and Weaknesses 44			
5.5 Lessons Les	5.5 Lessons Learned			
6 Communi	ity Teachers' College			
Lecturers'	Professional Development Project 46			
6.1 Project Overview				
6.1.1 Development context				
6.1.2 Description of project 4				
6.1.3 Situation at the end of the project 5				
6.2 Outcomes				
6.2.1 Economic Outcomes 53				
6.2.2 Institutional Outcomes 53				
6.2.3 Social and Cultural Outcomes 53				
6.2.4 Outcomes for women				
6.2.5 Perfor	mance of management			
6.2.6 Benefit cost analysis				
6.3 Sustainability				
6.4 Assessments of Strengths and Weaknesses				
6.5 Lessons Learned				
7 Conclusion				
List of Ann	exes			
Annex 1:	Logical Framework: Tax Project 61			
Annex 2:	Chronological Quantitative Data: Tax Office 67			
Annex 3:	Logical Framework: BCE Project			
Annex 4:	Chronological Quantitative Data: BCE 74			
Annex 5:	Logical Framework: CTC Project			
Annex 6:	Chronological Quantitative Data: CTC 77			
Annex 7:	List of Contacts			
Annex 8:	Scope of Services			
Annex 9:	Institutional Strengthening Projects			

Acknowledgments

The Evaluation Team gratefully acknowledges the information, comments and assistance provided by numerous individuals during the preparation of this report. AusAID staff, both in Canberra and in Port Moresby, were accessible, informative and have provided constructive comments. The management and staff of the three implementing agencies and the National Planning Office have also been very helpful and have given considerable time and helpful information to the Evaluation Team. We wish to particularly thank the coordinating staff, Mr. Peter Kochannek (TO), Mr. Mike McRae (BCE), Mr. Kingston Alu (NDOE) and Mr. Moses Koliwan (AusAID-POM) for gathering information, organising meetings and clarification on numerous issues. Ms. Annah Mase-tua (NPO) the government counterpart on the Evaluation Team accompanied the team while in the field and provided constructive comments on the report. A last special thanks and acknowledgment is due to Ms. Carolyn Brennan, Task Manager, Evaluations Section, AusAID who provided assistance too numerous to detail and valuable comments during all phases of the report preparation.

Acronyms and Abbreviations

ACS	Australian Custom Service
AIDAB	Australian International Development Assistance Bureau
AR	Appraisal Report
ASTAS	Australian Scholarship and Training Assistance Scheme
ASYCUDA	Automated System of Customs Data
AUD	Australian Dollar
AusAID	Australian Agency for International Development
B.Ed.	Bachelor of Education
BCE*	Bureau of Customs and Excise
CMC	Customs Management Committee
FS	Feasibility Study
GOA	Government of Australia
GOPNG	Government of Papua New Guinea
HR	Human Resource
HRD	Human Resource Development
IRC	Internal Revenue Commission
IS	Institutional Strengthening
IT	Information Technology
MIS	Management Information System
MOU	Memorandum of Understanding
MTR	Mid Term Review
NCC	National Computer Centre
NDOE	National Department of Education
NPO	National Planning Office
PC	Personal Computer

PCG	Project Coordinating Group
PCR	Project Completion Report
PDD	Project Design Document
PID	Project Implementation Report
PMG	Project Management Group
PNG	Papua New Guinea
PWU	Price Waterhouse Urwick
QUT	Queensland University of Technology
TO*	Tax Office
VI	Objective Verifiable Indicator

* The Bureau of Customs and Excise and the Tax Office merged in 1992 just after the completion of the BCE project and midway through the Tax Office project to form the Internal Revenue Commission. Both are now Departments within the IRC, but for clarity they are referred to as the BCE and the Tax Office in this report.

1 Executive Summary

This is the report of the ex-post evaluation of three institution strengthening (IS) projects in Papua New Guinea (PNG). The three projects are:

- Tax Office Institutional Development Project (1989 1994);
- Bureau of Customs and Excise Institutional Development Project (1987 - 1992); and,
- Community Teachers' College Lecturers' Professional Development Project (1989 - 1995)

The definition of institution strengthening used by the team for this cluster evaluation is:

The means to increase the capacity of institutions to perform their functions.¹

In addition, according to the DAC, successful IS projects should have enabled -

- understanding, commitment and ownership of the project by principal stakeholders and target institutions;
- management of performance in the target institutions (clear objectives, duties, incentives to perform, etc.);
- an understanding and consideration of the organisational and country specific context;
- the involvement of different types of organisations which can contribute in a complementary way; and
- the use of existing institutions to implement thereby avoiding the creation of Project Management Units.

A successful IS project should also start with a simple design which aligns country and institutional capacity with realistic time-frames and objectives, allows for close monitoring, and will have the flexibility to facilitate adjustment of the project as required. A

Based on: Evaluation of Programs Promoting Participatory Development and Good Governance: Synthesis Report; DAC Expert Group On Aid Evaluation; Organisation for Economic Co-operation and Development; 1997; pg. 47.

successful IS project should include appropriate delivery mechanisms, and careful selection criteria plus clear Terms of Reference for technical assistance personnel.

The projects discussed in this report have been assessed against these criteria.

Because of the magnitude of the projects and their specific objectives, this evaluation has focused on the outcomes for the major beneficiaries or stakeholders of the projects rather than assessed the impact of the project at the national or macro level.

The evaluation is based on a review of available documents such as Project Design Documents, Project Implementation Documents, Mid-term reviews, and Project Completion Reports. In addition, interviews were held with staff of AusAID's PNG Branch in Canberra and Port Moresby, the project implementing agencies and other relevant in-country stakeholders. The evaluation was undertaken over a seven week period including three weeks in AusAID, Canberra and four weeks in Port Moresby. De-briefings of the implementing agencies and the National Planning Office were held in Port Moresby prior to the evaluation team's departure for Australia. A draft report was completed in PNG and finalised following receipt of comments by GOPNG implementing agencies and AusAID.

Over the life of the three projects from 1985 to 1995, Papua New Guinea underwent considerable socio-economic change and many of the changes in both the medium and the longer term affected the projects. The main factors influencing project implementation and sustainability have been continued social unrest, reliability and quality of the infrastructure, limited capacity of institutions to absorb the extra work of projects, turnover of staff, and financial constraints on government spending including a freeze on recruitment.

Tax Office Institutional Development Project

The implementing agency for this project was the Tax Office and the contractor was Price Waterhouse Urwick (PWU) of Brisbane. The project commenced in 1989 and was completed in 1994 and had the following project goal:

To improve the operational and institutional capacity of the Tax Office to administer the Taxation Act in an effective and efficient manner as a basis for increased revenue collections through increased compliance with the tax laws. Project components focused on the strengthening of an organisational structure to facilitate greater autonomy in operations and improve efficiency and effectiveness in revenue collection. The project was also directed at updating operating procedures, including the introduction of computer processing activities, upgrading staff capabilities through improved training processes and institutionalising these changes. In addition, activities were undertaken to ensure effective project management. Over 85% of funds were allocated to two components, the computer facility implementation (50%) and revision of procedures and training (35%).

The project assisted the overall improvement of the operational and institutional capacity of the Tax Office. Actions taken by the Tax Office to sustain benefits arising from the project have, by and large, been successful despite the fact that project implementation was beset with difficulties. Sustainability of project initiatives has been enhanced through the Tax Office's active pursuit of computer processing via a self-sufficient Information Technology Branch and the continuation of training activities.

Most components were, however, not completed or only partially implemented. Management of the project was problematic as attested to by the contractor, the Tax Office and the mid term review. The problems seemed to originate from the poor working relationship between the implementing agency and Price Waterhouse Urwick (PWU) as well as from inadequate monitoring of project implementation. Differences of opinion and poor communication bedevilled the computerisation component that was, by project end, only 50% completed.

The major verifiable objective of the project was intended to be the changes in the magnitude of revenue collected. The significant growth of the economy, including the commencement of several large private sector resource projects and the administrative changes to tax regulations make it impossible, however, to make a direct link between changes in revenue and project activities although tax revenue did increase.

Bureau of Customs and Excise Institutional Development Project

The implementing agency for this project was the Bureau of Customs and Excise (BCE). The contractor was the Australian Customs Service (ACS) of Canberra. The project commenced in 1987, was completed in 1992, and had the following project goal:

To improve the capability, operations and self-image of the Bureau of Customs and Excise and its staff.

Project components focused on the development of core management competencies and skills, availability of meaningful management information (MIS), review and re-design of existing systems and procedures within certain functional areas, and formal training to support these including the development of a Training Unit.

All components of the project were implemented, with particular success in the area of procedure and systems reform including training. Customer servicing was more timely, resulting in speedier revenue collection and fewer defaults. A range of corporate management systems was in place and both the image of the BCE and the confidence of its staff had improved.

There were certain other variables which may have contributed to this improvement, for example the containerisation of international cargoes and the installation of a customs computer processing system in 1993. Without the project's assistance to review and streamline manual systems however, both these events would have presented much greater challenges to BCE than was the case.

In 1992, immediately following completion of the project, BCE was amalgamated with the Tax Office to form the Internal Revenue Commission. This merger had a rather negative effect on BCE and consequently, on the sustainability of some project components.

Following the merger, organisation structures and policies changed, and in the absence of focused management, many initiatives introduced during the project lapsed. Management information for effective control is no longer available from field audits and investigations and liaison with external agencies is limited. The MIS no longer reports on performance variables. Technical training is under-resourced because of GOPNG budget cuts and remains a major problem in locations away from Port Moresby. Morale, particularly of middle managers, is low.

A sample BCE's larger scale customers, based in Port Moresby, confirmed that there was significant, overall improvement in processing and operations during the project and that this improvement has, by and large, been sustained. This is not as evident for customs operations outside Port Moresby. Customers also identified a reduction in staff knowledge and skill in entry-level operating staff. Managers and staff who participated in project training are generally confident and knowledgeable about their work while new staff who have not undergone training, are perceived as less capable. Additional formal training will become increasingly important to maintain operational performance.

Community Teachers' College Lecturers' Professional Development Project

The implementing agency for this project was the National Department of Education (NDOE). The contractor was the Queensland University of Technology (QUT) of Brisbane. The project commenced in 1990 and, with a 12 months' extension, was completed in 1995. The project had the following project goal:

To improve the educational standards of the Community Teachers' Colleges (CTCs) through the professional development of their teaching staff.

The project consisted of two main components. The first involved academic course work in Australia at the QUT and the second was a series of in-country workshops intended to prepare lecturers and associate lecturers for their Australian studies and to sustain their professional development once they returned to PNG.

In all, seventy-six lecturers and associate lecturers studied at QUT of whom 13 were women(17%). The overall completion rate for all students was extremely good, with only one returning to PNG before the end of the academic year. This was a completion rate of over 98%. Available ASTAS data indicate that approximately 50% of ASTAS students require extensions to comply with requirements for an academic award.

Although lecturers and assistant lecturers received training under the project, the impact of the project on the education standards at CTCs as a whole, is difficult to assess. There has been a high retention level of participants with fewer than one-quarter having left the CTCs. Of those who have left, some remain within the education sector while others continue to contribute to the PNG economy in other occupations. While the project's primary goal sought to strengthen the educational capacity of CTCs through the professional development of their lecturers, the limited, technical approach taken by this project inevitably constrained its sustainability. The project goal may have been more effectively

achieved with the inclusion of components involving the strengthening of college management and administration, provision of research materials and other resources, and the establishment of a professional association for teacher educators. The project was not, therefore, in the terms of the definition adopted early in the report, a typical institutional strengthening project.

Because the project design did not allow for the development of networks and professional associations, sustainability of the improvements in lecturers' competence is dependent on the motivation of the lecturers to seek out further professional development opportunities and on GOPNG funding for workshop and staff development programs.

There is strong anecdotal evidence that both the quality of teaching in the CTCs and the calibre of recent graduates have improved. In the second year of the project, the curriculum for primary teachers was changed from 2 to 3 years through an initiative of GOPNG. It is reasonable to assume that this change would have had positive effects on the quality of recent graduates. It is not possible to say that the project alone was responsible for these improvements in the performance of recently graduated teachers.

Lessons Learned

The evaluation team considered each project against the DAC identified characteristics of successful IS projects listed earlier, to provide a framework for the evaluation and to assist with a meaningful comparison of lessons learned. The team also took into account the impact of each project on the major beneficiaries identified in the respective Project Implementation Documents.

Understandably, the focus of lessons learned even within these broad characteristics varies between projects. Lessons learned which are project specific are included in the discussion of each project although all can be generalised to apply to the design and implementation of other AusAID projects. The evaluation team considers the following lessons are of particular importance and are well illustrated by comparisons between the three projects.

With respect to project design, key lessons include the need for more creative use of external stakeholders in project activities, including design, to provide a forum for discussion of relevant issues and to assist the measurement of changes to institutional performance. An industry association or professional standards group is also likely to maintain pressure on the implementing agency following project completion and so increase the probability of sustained performance. In the CTC project for example, project assistance to establish a professional association for teacher-educators would have served to provide a forum for research once participants had returned to their colleges. Such an association may also have encouraged the development of national networks.

Verifiable indicators (VIs) should be clearly related to project outcomes and be measurable. VIs in the CTC project could not be related to project outcomes and within components, were neither defined nor measurable. In the Tax Office project, revenue and productivity indicators were set but were not directly related to project outcomes, and were not clearly defined or measured during the project. Only in the BCE project were component and subcomponent indicators appropriate and actively used as a management tool by BCE executives and the contractor to monitor and improve the organisation's performance.

With respect to IS projects, components seeking to strengthen management capacity need to be considered from the outset as longer term initiatives that will require post-project reinforcement. Where necessary, the project should put in place the means of reinforcement that will continue following completion of the project. The high level of BCE commitment to improved management practices introduced by the project was expected to guarantee sustainability. In the face of extensive organisational restructuring, however, management competencies within BCE proved fragile and would have benefited from support following project completion.

Training, particularly technical training, should be integrated into all components of IS projects rather than being separated out into a training component. That having been said, the establishment of a centralised training unit can assist the development of materials and the conduct of training needs analyses during the life of the project. The differing approaches adopted in the Tax and BCE projects indicate the importance of technical training as an intrinsic part of procedures review and redesign. It is the view of the evaluation team that improvements in customs operations would not have been sustained to the level they have been if technical training had been divorced from the process of procedures review.

All three projects clearly illustrate the fact that IS projects require longer-term commitments in terms of training and follow-up. The impact of external events, the ongoing commitment of at least some individuals to the changes, and the ability of the organisation to attract and retain resources and to apply them to reinforcement strategies such as regular technical training, have all had major impacts on the sustainability of these projects.

2 Introduction

This is the report of the ex-post evaluation of three institutional strengthening projects in Papua New Guinea (PNG):

- PNG Bureau of Customs and Excise Institutional Development Project (1987 - 1992);
- PNG Tax Office Institutional Development Project (1989 1994); and
- PNG Community Teachers' College Lecturers' Professional Development Project (1989 - 1995)

The scope of the evaluation was to identify how effective the projects have been in achieving their goals or purposes, whether those effects have been sustained, what the outcomes of the projects were and to identify what lessons can be learned from the projects.

To do this, it is necessary to:

- define institutional strengthening and present characteristics of successful IS projects;
- elarify the terms used in this report; and
- discuss some limitations of the documents and data used in the report.

First, as the process of institution strengthening lacks a rigorous definition, the evaluation team has used a working definition of "institution strengthening's follows:

The process of institutional strengthening means to increase the capacity of institutions to perform their functions.²

To evaluate institutional strengthening projects using this definition, it is necessary to identify which interventions have increased the institution's capacity and how that is related to performance of their functions (outcome).

The characteristics of successful IS projects referred to in a DAC report³ are the criteria against which the projects have been evaluated.

² Based on: Evaluation of Programs Promoting Participatory Development and Good Governance: Synthesis Report; DAC Expert Group On Aid Evaluation; Organisation for Economic Co-operation and Development; 1997; pg. 47.

³ ibid

- Understanding, commitment and ownership of the project by the principal stakeholders and target institutions;
- Management of performance in the target institution (clear objectives, duties, incentives to perform, etc.);
- An understanding and consideration of organisational and country specific context;
- The involvement of different types of organisations which can contribute to project activities in a complementary way;
- The use of existing institutions to implement the project and, in this way, avoid the creation of Project Management Units;
- Simplified designs that align country and institutional capacity with realistic time-frames and objectives. Designs should also ensure close monitoring and be sufficiently flexible to take account of changes which may become desirable during the life of the project; and
- Appropriate delivery mechanisms and clear Terms of Reference for technical assistance personnel.

Second, at the ex post evaluation stage, the project impact or effect is ideally measured at the macro or national level. Given the small size of the projects and their specific focus, any causal relationship between the outputs of the projects under discussion and national impact was small, confounded by numerous other impact variables and, therefore, impossible to quantify. Therefore, this evaluation has focused on the outcomes for the major beneficiaries or stakeholders related to the projects.

Third, the main documents used in this report have been those prepared by the contractor, the mid-term reviews, and information and testimonials provided by implementing agencies and stakeholders. The report uses only that information which was consistently mentioned by multiple sources. The evaluation team believes this information is reasonably reliable and represents valid indications of events and outcomes. Attempts to access AusAID archived files containing views independent of the contractor's were not successful. A possible reason for this difficulty was that project files are sometimes given different titles at various stages of their project implementation.

Attempts were also made to gather data on 'verifiable objective indicators' (VIs) listed in the logframe documents. Some of the main VIs were found to be imprecisely related to project goals and confounded by numerous other variables which made substantiating project outcomes at the macro level unfeasible. In some instances, baseline data was collected during the early stages of the project but the implementing agency was unable to collect additional, and comparable, data following project completion. Some organisational and functional performance indicators have been gathered and are presented in the Annexes and discussed in the appropriate section of the report.

This report is organised into seven sections. The executive summary, the introduction, the general background (providing a summary of the socio-economic context in which the projects were designed, implemented and sustained), three project sections and a conclusion with recommendations. Each project section presents an overview of the project including implementation, impact, the sustainability, strengths and weaknesses and lessons learned.

3 Background to Projects: General

3.1 Development Context of the Projects

The considerable socio-economic changes experienced by PNG between 1985 and 1995 affected project implementation. In addition, other vexed issues complicated the environment into which the projects were implemented. These issues included relative political instability, continued social unrest, the reliability and quality of the infrastructure, limited capacity of institutions to absorb the extra work of projects, high staff turnovers, and financial constraints on government spending including a freeze on recruitment. Social unrest and lawlessness has restricted the personal mobility of individuals, put property at risk and resulted in difficulties with recruitment and retention of long term Advisers associated with aid projects. Many of these factors continue to affect the sustainability of the projects evaluated.

GOPNG's fiscal policies in the mid to late 1980s seemed likely to ensure a favourable climate for development assistance to improve the effectiveness and efficiency of government agencies. The Government's strategy for the economy placed considerable emphasis on fiscal self-reliance, with internal revenue collection the fundamental building block. The Government's HRD strategy aimed to reduce the size of the Public Service while improving its efficiency through major productivity initiatives coupled with significant training and development within the public sector.

Although the budget situation was tight and economic growth had levelled off throughout the 1980s, it was only with the closure of the Panguna copper mine on Bougainville in 1989, that the PNG economy suffered a major set-back. This led to a major economic crisis early in 1994, intervention by the International Monetary Fund (IMF) and the World Bank in 1995, and implementation of a structural adjustment program by GOPNG. Additional budget constraints occurred in 1997 requiring substantial reductions in government agency budgets.

In 1995, provincial and local government reforms were introduced through changes to PNG's Organic Law. The reforms were

intended to devolve provision of, and responsibility for, many government services to the local level together with an emphasis on more transparent decision making and improved public administration. Issues relating to the delivery of national functions through local agencies and the relationship between national and provincial administrations are still being worked through. Implementation of the changed Organic Law will place even greater demands on the country's public administrators.

Reduction of the size of the public service remains a priority for Government but is not occurring as originally planned. Skilled public sector employees, many of them trained overseas as a result of donor aid, are moving to the private sector and cannot be replaced following the Department of Personnel Management (DPM)'s recruitment freeze of 1996.

A perceived reduction in public service benefits, difficulties for the government in adding to and maintaining existing housing stock, challenges with funding leave fares and the ongoing public debate about protection of public sector superannuation benefits have also contributed to the poor motivation of many public servants.

The three projects arose from requests by the Government of Papua New Guinea (GOPNG) to the Government of Australia (GOA) in 1985 and 1987 to provide assistance in strengthening the institutional performance of key revenue collection agencies (Customs and Tax) and, in the case of the Community Teachers' Colleges project, in improving the capacity of the country's teacher training institutions to deliver educationally relevant teacher education.

4 PNG Tax Office Institutional Development Project

The project contributed to the improvement of the operational and institutional capacity of the Tax Office. Although a number of the individual components were not successfully implemented, the Tax Office has been able to use the base established by the project to sustain and develop its institutional capacity. Sustainability has been enhanced through the establishment of a self-sufficient Information Technology Branch and through continuation of training activities the two main components of the project.

The project design identified an increase in revenue collected as the principal Verifiable Indicator of a successful project. There was a significant increase in revenue collected over the period of the project but the significant growth of the economy, including the commencement of several large, private sector resource projects, and the administrative changes to tax regulations, make it impossible to relate changes in revenue directly to the project. The project may have been more effective had the skills of the contractor been more closely linked to the needs of the Tax Office. Active monitoring by the implementing agency itself may also have contributed to more positive outcomes. Closer monitoring by AusAID in the early stages of the project may also have assisted the project through the difficulties inherent in the start-up phase.

4.1 Project Overview

Documents

Documents relating to feasibility studies as well as project design and implementation were unavailable making it difficult for the team to develop a comprehensive overview of the design, implementation and completion of the project. The Appraisal Report (AR) was, therefore, used as a guide to the starting point of the project. The mid term review report was available, but not the reports of the three subsequent special reviews. Price Waterhouse Urwick's Project Completion Report (PCR) was also available but compared with the PCRs of the other projects evaluated, was somewhat vague and incomplete, lacking both a Logical Framework Matrix and a Change Frame. No baseline data report has been located. A search of the file archives at AusAID, Canberra, was not successful in locating additional information.

4.1.1 Development context

The Tax Office's main responsibilities include the determination and collection of all national taxes in accordance with the legislation as well as investigation, auditing and compliance actions associated with collection. Total staff in the organisation at the commencement of the project, was around 220 mostly located in Port Moresby.

Certain cultural values were identified as a constraint on the capacity of more junior Tax Office staff in carrying out their duties. These values included a customary sharing of wealth among relatives and a hesitancy to enforce compliance particularly where more powerful individuals or groups are concerned. In addition to cultural factors, the record keeping and accounting practices of many local businesses may have limited the accurate determination of their financial status. During the last two years of the project, the Internal Revenue Commission was formed by merging the Tax Office and the Bureau of Customs and Excise (BCE) into a single organisation. The project design was not amended to take account of this event. An opportunity may have been lost to assist the IRC into existence and ensure the sustainability of activities initiated under each project.

4.1.2 Description of the project

The PNG Tax Office Institutional Development Project commenced in April 1989 and was completed in March 1994. The project had the following goal:

To improve the operational and institutional capacity of the Tax Office to administer the Taxation Act in an effective and efficient manner as a basis for increased revenue collections through increased compliance with the tax laws.

The title and main objectives of the components of the project were:

Taxation Legislation: Provide for the administrative independence of the Tax Office;

- Definition of Taxpayer Base: To identify the areas, and assess the degree of non-compliance, of the PNG tax base;
- Computer Facilities Implementation: To provide an effective 'in house' information processing service;
- Training*: To develop sustainable staff training and development plans and programs, together with staffing capability and procedure manuals to support the above;
- Sales Tax: To provide effective and efficient procedures to collect and process Sales Tax;
- Corporate Planning**: To establish an effective corporate planning system within the Tax Office; and
- Project Administration, Management and Implementation: To ensure effective project implementation.

* In some documents, training and procedure development are separate components.

** The corporate planning component was approved and added in 1990.

The appraisal report estimated the funds required to implement the project were AUD\$8.9 million by the GOA and AUD \$2.3 by the GOPNG over 5 years. The project resources initially included 475 person months (p/m) funded by Australia and procurement of AUD \$0.5 million of computer equipment and peripherals also funded by Australia. GOPNG was to provide 429 p/m and project facilities. A memorandum of understanding was signed in January 1988. The implementing agency was the PNG Tax Office and the contract to manage Australia's input was awarded to Price Waterhouse Urwick (PWU) of Brisbane.

During the project, 6 contract variations were approved adding an estimated 127.6 p/m. PWU estimated that a total of 593 p/m were required to complete the project. The final GOA contribution to the project was around AUD \$11.4 million. The GOPNG contribution is estimated at AUS \$5.4 million.

The intention of the project was to assist staff and management to work in a more effective and efficient organisation, to ensure that customers receive better service and that the government should receive greater revenue through improved compliance with the tax laws. According to the Appraisal Report, the feasibility studies undertaken in 1986 identified a number of factors hindering the operations of the Tax Office. These were an outdated organisational structure and outdated procedures (including computer processing), a lack of qualified technical staff in the compliance area and a lack of autonomy in the management of day to day activities.

Inputs & Activities

Project activities dealt with the development of an organisational structure which would reflect the legislation, facilitate more autonomy in operations and improve efficiency and effectiveness in revenue collection. Activities also focussed on the updating of operating procedures including the in-house computerisation of processing activities, the upgrading of staff capabilities through improved training, and institutionalising these changes. In addition, activities were undertaken to ensure effective project management. At the feasibility study stage, over 85% of funding from the GOA was allocated to the computer facility implementation (50%) and to training (35%). Annex 1 contains the logframe matrix for this project.

Taxation Legislation, Provincial Sales Tax and Definition of Taxpayers Base

None of these three components was completed successfully. The only completed aspects of these components were the autonomy to establish an internal computer system, an Information Technology (IT) Branch and a Human Resource and Staff Development Branch. Sub components for the preparation of a new organisational structure and draft duty statements were completed. Nevertheless, formal approval for, and staffing of, the new IT and Human Resources Branches took approximately 2 years.

Legislation: Legislation to create greater autonomy was prepared to the draft stage but never submitted to the National Executive Council. There was, apparently, resistance to the draft legislation from the Department of Finance and Planning, and the Department of Personnel Management.

The establishment of a tax court to facilitate prosecution for noncompliance was not achieved via the project. Independently of the project, the Tax Office negotiated with the Justice Department for the establishment of a Tax Court within the justice system. The court was initially funded by the Tax Office but is now wholly funded by the Justice Department and deals with commercial, tax and customs matters.

The appraisal report identified the risk associated with implementation of a component dependant upon prerequisites for success. In this case, the prerequisite was the formal approval of legislation. The report noted however, that there was strong political support for that legislation prior to project commencement. In hindsight, given the changes in ministers and senior government officials mentioned in Section 2.1 above, and the length of time from feasibility (1986) to implementation (1989), the risk of including this component was probably too high. The recruitment of additional and counterpart staff for the project was considerably delayed by the non-completion of this component.

Provincial Sales Tax: Effective implementation of the provincial sales tax component was outside the control of both the Tax Office and the contractor. Sales tax authority was given to provincial governments in the 1980's and was an important source of revenue for these governments. The project prepared a proposal for collection of sales tax by the central government on behalf of the provincial governments. The logic for the proposed change was the need to increase the efficiency of collection and compliance with sales tax regulations. This component of the project was suspended by the Project Coordination Group (PCG) in 1991.

Definition of Taxpayers Base: Research to define the taxpayer base in support of the legislation components was not successfully completed because of the lack of information. The planned approach to activities within this component relied on a socio-economic tax data base (part of an earlier project), being available for study and analysis. The GOPNG had, however, stopped using this data base in 1987. The project team made the decision to use the existing data base to frame ideas for improving compliance.

The inclusion in the project design of a component to define the taxpayer base in PNG seems to indicate that insufficient investigation was completed in the feasibility and design stages of the project to assess the usefulness of the available data. The failure to complete this component meant that the magnitude of non-compliance could not be identified. Identification of the extent of non-compliance was a major objective of the project. An option available to the project was to set up an information system instead of continuing with the analysis. This may have assisted the Tax Office to establish

a regime of data collection. It seems, however, that there is no ongoing activity to gather and analyse data on the taxpayer base other than that associated with the known tax base, audit and investigative activities. The Tax Office will introduce a 'value added tax' in 1998 which may capture some of the revenue lost through non-compliance.

Computer Facilities Implementation

The aim of this component was to establish a computer function with the Tax Office to increase the efficiency of the (largely manual) systems. This component utilised over 50% of total project funds.

Implementation was problematic. The Appraisal Report identified this component as the least precisely defined and with the most potential for overruns. The Appraisal Report also recommended that the development of computer systems be on a sub-component (discrete applications) basis using fixed price contracts. According to the Report, the original estimates of applications and sub-programs to be developed was 50 in the Feasibility Study and was reduced to 40 recommended by the Appraisal Report. Nineteen applications and sub-programs were completed according to PWU's project completion report.

Comments from the mid-term review indicate there were communication and decision systems problems, staffing shortages in the Tax Office, compatibility problems between computers in the Brisbane office of Price Waterhouse Urwick and their Port Moresby office, problems with the water supply, and problems with implementation, planning and management. Interruptions in electricity supply of up to 4 hours a day resulted in excessive downtime for the computer. Officials from the Tax Office associated with the implementation are of the opinion that the computer development strategy used by the contractor was not appropriate, that personnel selected by the contractor for this component lacked the necessary tax experience and that management of implementation was problematic.

PWU's completion report indicates that a pilot project, systems development strategy and plan were well received by, and agreed with, the Tax Office. Officials of the Tax Office disagree with these comments. In the view of those officials, there were problems with reaching agreements on systems specifications and priorities because there was no agreed implementation plan. Further delays were experienced because of difficulty in recruiting suitably qualified counterpart staff and the Tax Office Computer Manager suffered from ill health for over a year before being replaced. These staffing problems lowered the probability that the Tax Office would be self sufficient in the operation and maintenance of the computer systems as originally planned. During this period, there were water leaks in the building housing the computer facilities which necessitated closing the building on numerous occasions.

At the commencement of the project, the Tax Office was using the National Computer Center (NCC) for all its computer support. There were 32 terminals located at the Tax Office but only one Systems Analyst, hence the level of technical knowledge of computer systems across the Tax Office was limited. The nature of Tax Office operations required a great deal of integration if there were to be improvements in processing and greater compliance. It seems PWU may not have fully understood the operations and systems requirements of the Tax Office. The mid-term review identified 24 main systems requiring integration with the core systems. In the early stages of the project, PWU utilised a discrete sub-component development strategy which involved developing each suite of programs on a stand-alone basis and used Technical Advisers who had little experience with tax systems.

As background, in the mid to late 1980's, normal business computer systems tended to be discrete and there was no major reason to integrate them. There was a revenue system based on customers, an expenditure system based on suppliers, and sometimes an assets system. If there was integration it was normally for the provision of summary data for profit and loss and balance sheet preparation.

The discrete systems approach taken by PWU was resisted by the Tax Office. The mid-term review noted that there were some communication problems amongst the contractor's own advisers which may have complicated the systems integration issue. The review also noted that some compromise on a systems development strategy by both parties may have reduced this problem. At the end of the project none of the applications was fully operational.

The mid-term review identified other difficulties with this component. The report indicated that insufficient time and resources would preclude completion of the component as designed and provided detailed implementation schedules including additional reviews. Three additional special monitoring reviews were initiated in 1993 by AusAID to get implementation back on track. PWU replaced the manager of this component in the last 2 years of the project with a manager who had tax experience and implementation appeared to improve.

Training and Procedures

This was the second major component in the project and focused on revising procedures and developing training programs to underpin those revised procedures.

The procedure manuals used by the Tax Office were based on modifications to 1975 Australian Tax Office procedures and were, by the late 1980's, no longer suitable for the activities of the PNG Tax Office. During 1990 and 1991 revised procedures were developed in two streams. The streams were those related to computer processing and to the other processing systems which would continue to be manual.

Implementation of this component commenced slowly because of staffing problems experienced by both the Tax Office and by PWU, a divergence of views between the Project Manager and the Tax Office's Human Resource Manager on most issues, poor communication, delayed decision-making, and a lack of appropriate experience and cultural understanding by some Training Advisers.

The delays in staffing the Human Resources Branch have been alluded to already. PWU also experienced delays in fielding qualified staff. Most of the training staff they identified were from the Australian Tax Office and had suitable procedural experience but lacked expertise in training. PWU eventually provided train-thetrainer courses to Advisers. The mid-term review indicates that the delay was probably beneficial because the availability of PNG Tax Officers for training was increasing by the time training programs commenced due to reduction in work demands associated with the project.

By late 1992 the Tax Office had not formally accepted any of the more than 80 training modules completed by PWU. The delay in accepting the training modules was caused by a disagreement between PWU and the Tax Office about who was responsible for initial delivery of the training programs. Although communication systems were established through various committees, these did not seem to function well. As mentioned earlier, the lack of communication amongst the contractor's Advisers resulted in misunderstanding and confusion among Tax Office officials. The mid-term review indicates the revised manuals were of a high standard and well presented. In many cases they became the core documents for training. The computer systems were re-designed and procedures amended for computer processing during the final two years of the project but the manuals were not updated.

Thirty training modules provided a self-paced learning program for staff in the Assessments Branch, a key feeder group for other areas of the Tax Office. In addition to training modules, special on-the-job training systems were developed for staff in the auditing area of the Tax Office. Two separate Audit trainee intakes, each of 10 officers, completed a comprehensive training program during the life of the project. Their training included a systematic on-the-job program. Subsequent intakes received training programs ranging from three to five years. These training programs have enabled the Tax Office to maintain a core of approximately 20 fully trained tax auditors.

By the end of the project, 501 staff had participated in five training programs based on revised procedure manuals comprising 97 modules. Implementation of training programs was generally successful by the end of the project.

Corporate Planning

This component was added to the project at the request of the Tax Office in 1990. The Tax Office had completed a corporate plan in 1988 but requested assistance from PWU in formalising the planning process. The contractor prepared a corporate planning procedures manual and conducted several workshops to facilitate the preparation of a corporate plan. The first plan was produced for the period 1992 to 1996 and released in 1992. The mid-term review indicates this was an excellent first attempt and could be improved by incorporating a business plan, a human resource plan, and a technology plan in the future. In 1992 the Tax Office and the Bureau of Customs and Excise were merged to form the Internal Revenue Commission. The activities associated with the merger meant that corporate planning was not given priority. No further corporate plans were completed during the project.

Management

The management of the project was problematic as attested to by PWU, the Tax Office, and the Mid-term review. The problems seemed to originate from the poor working relationship between the Tax Office and PWU and the lack of clarity on responsibility for monitoring the implementation of the project. The computerisation component became the focus for these misunderstandings.

The project established a Project Coordination Group (PCG), several types of coordination committees within the Tax Office, and prepared appropriate monthly, six monthly and annual reports. It seems the Tax Office counterpart manager had little involvement with the preparation of these reports.

PWU's completion report identified several areas which affected the management of the project including the assumptions made about the imminent passing of legislation, frequent changes in AusAID staff both in Canberra and PNG and absence of a component to deal with organisation and management development.

Tax Office officials expressed concern that the selected contractor had limited experience in implementing tax related projects, that advisers lacked appropriate experience particularly in the computer systems component, and that without access to the contract they were powerless to monitor and evaluate the project. In addition, officials were concerned about the lack of provision for monitoring the contract within the project design. The confrontational situation which developed between the Tax Office and PWU was probably made worse by the fact that PWU referenced their contract with AusAID as the reason certain things could not be done and the Tax Office was not empowered to access the contract.

Tax officials expressed to the evaluation team the view that, with the increased monitoring instituted by AusAID following the mid-term review, and with PWU's employment of a computer component manager who had tax experience, implementation significantly improved in the last two years of the project.

The poor working relationship between the Tax Office and PWU may have been partly caused by the fact that the Tax Office did not think PWU the most capable of the 4 bidders for the project. Communication may also have been affected by the Tax Office's low level of experience with computer technology at the commencement of the project.

Regardless of the problems identified in the various institutions and groups concerned with the implementation of the project, it would seem that the main problem was that responsibility for monitoring the project was not vested in a single institution, or was not clearly defined in the project design, or was not accepted by the parties concerned. It would also appear that no verification that the monitoring system was working correctly was undertaken until the mid-term review.

4.1.3 Situation at the end of the project

Taxation Legislation, Definition of Taxpayers Base and Provincial Sales Tax

These three components were not completed as designed during the project.

Computer Facilities Implementation

It is estimated that less than 50% of the expected systems development work was completed and none of the applications was operational by the end of the project.

Training and Procedures

The training and procedural component achieved project design goals.

Corporate Planning

Corporate planning procedures and training workshops were completed. Only the 1992 plan was prepared.

4.2 Outcomes

4.2.1 Technical Outcomes:

One of the main computers installed as part of the project has been up-graded and is the main processing unit for the Tax Office. The other main computer is used for development work. Computer systems have been continually developed since the completion of the project and the use of computers is having a positive impact on the operations of the Tax Office.

4.2.2 Financial Outcome

The establishment of the IT Branch and the operation and maintenance of the computer systems seem to be a priority of the IRC and associated recurrent costs continue to be met. Development costs seem to have increased since the project but it was not possible to obtain data to verify that increase.

The limited funds available for training have circumscribed training activities. Most of the technical training is conducted within centralised work units so training and staff development have continued. Funds for audit investigations have been restricted and only limited audit activities have occurred over the last few years outside Port Moresby.

4.2.3 Economic Outcomes

The major verifiable indicator was to be the increase in revenue through more effective and efficient operations and a reduction in non-compliance. Since the commencement of the project in 1989 tax revenue has increased by around 236%. It is not possible however, to separate the project contribution from the main variables of economic growth and inflation.

Because the component to develop a taxpayers data base was not completed there is no data available on reduction of noncompliance.

4.2.4 Institutional Outcomes

Limited productivity information is available to establish whether there have been increases in effectiveness and efficiency of Tax Office personnel.

Within the audit area there has been an increase in localisation from 60% of audit staff in 1989 to 90% today. Since 1993 there has also been a steady increase in the number of total audits per staff (7.0 to 11.1) and the number of completed audits per staff (3.8 to 5.8). These trends indicate that a greater number of trained PNG citizen staff are performing audit duties and that the productivity of these officers is improving. Annex 2 provides statistics on the increase in the numbers of citizen staff employed during the life of the project. Statistics on employment of PNG citizens were not kept prior to the project.

4.2.5 Outcomes for women

No base line data is available on the composition of the workforce at the commencement of the project. The workforce of the IRC is now approximately 30% women. There are no barriers to the recruitment and promotion of women in the organisation and in certain branches there are more women then men.

4.2.6 Performance of management

Since completion of the project, IRC management has focused on the development of computer systems. In addition, training has received a high priority in the audit area and to a lesser extent in the assessment area. The integration of the Tax Office and the BCE is an on-going process and it seems that tax activities have received higher priority than customs activities.

4.2.7 Benefit cost analysis

The VIs for project goals were staff productivity, increased revenue and sales tax collection. There are no records for productivity. The sales tax component of the project was not completed. It is not possible to link the contribution of the project to current revenue collected. In addition, project cost information was not reported on a component basis. Insufficient data is, therefore, available to complete a cost benefit analysis.

4.3 Sustainability

Despite the difficulties experienced during implementation, the project does meet some criteria of successful IS projects. The project set in train activities which have been sustained through commitment by the Tax Office to the overall objectives of the project. The specific activities which are continuing include the strengthening of the IT Branch and training of Tax Office personnel.

Tax officials indicate that most of the work within the IT Branch has concentrated on the integration of the various systems completed during the project and that a further year or two will be necessary to complete this development work. Nevertheless, the computer system is now working independently from the National Computer Centre and is self-sufficient in operation and maintenance.

Procedure manuals and training modules are used and their applications in the audit area have been particularly successful. The audit procedure and training programs have been institutionalised by the Tax Office and are an important and continuing part of the activities of the Audit Branch. PNG citizen staff conduct all training and use the modules and procedures developed during the project. Of the original 3 trainee intakes, half are no longer in the audit area with approximately a third having left the IRC. Training materials and procedures have been updated by the audit staff. Customers advised the evaluation team that weaknesses in intelligence gathering by the Tax Office and in the knowledge base of some audit staff indicate that additional training programs may be needed.

It is the evaluation team's opinion that credit for the achievements and sustainability in the Audit area is due, in large part, to the commitment and persistence of the Director and senior audit staff. Training in the assessment area followed a similar pattern with the development and up-dating of procedure manuals and supporting training manuals. Until 1996, training was mainly coordinated by non-citizen staff, however supervisory citizen staff are now involved. The training programs do not appear to be as structured as in the audit area, but the updated materials reflect changes to tax legislation and are used by staff to clarify issues.

Although corporate planning was not continued following the merger, it is currently being reactivated. The IRC now has a draft corporate plan encompassing both the customs and Tax functions and intend to complete the plan this year.

Tax agents who represent taxpayer stakeholders are of the opinion that the general accuracy of taxpayer information held by the Tax Office is better now, but that there is a problem of integration and communication between the various functions in the Tax Office. They also advised the evaluation team that, in their view, auditing and assessment activities have improved over the years since the project.

The general opinion of tax agents is that the Tax Office has sustained, and in some areas improved, the level of performance achieved at the end of the project. Despite the difficulties, the project did assist the overall improvement of the operations of the Tax Office. The Tax Office's strong sense of ownership of the project is reflected in the actions taken by the Office to sustain benefits arising from the project.

4.4 Assessments of strengths and weaknesses

Strengths:

The Tax Office has continued the development of procedures, training materials and training programs devised during the project.

Weaknesses:

- Project design was based, in part, on activities over which neither the contractor nor the implementing agency had control;
- There was a poor working relationship between the Tax Office and PWU which resulted in communication breakdowns;

- PWU and its Advisers lacked relevant experience in implementing tax projects;
- Advisers lacked an awareness of cultural influences on their PNG counterparts;
- Lack of objectively verifiable indicators;
- Monitoring of the project by AusAID and was not effective in the early stages of the project;
- Procedures were not updated at the end of the project to incorporate changes which occurred during the project; and
- The project design was not amended to take account of the impact of the merger with the Bureau of Customs and Excise.

4.5 Lessons Learned

Organisational and environmental context of the project

- The project design should not have been dependent on resolution of issues outside the control of the implementing agency or the contractor eg the passage of legislation.
- Consistency in the naming of AusAID files on projects throughout implementation would assist evaluators to access the full range of information available.
- The technical capacity of the implementing agency needs to be sufficient to facilitate communication, decision making and monitoring of all components of a project. Where technical capacity is low it should be developed prior to the project or supported by technical advisers working independently of the contractor.
- Baseline data should be gathered in the earliest stages of project development.

Design Issues

- Identifying, fostering and developing commitment and ownership of the project should be incorporated in all project development activities.
- Werifiable indicators should be clearly related to project outputs and be measurable. In this project revenue and productivity indicators were set, however, the revenue indicators were not

directly related to project outputs and productivity indicators were not defined or measured during the project.

Project design should identify milestones to facilitate project monitoring. In this project schedules reflected only personnel and costs input.

Implementation

- When it is determined that a component cannot be completed as designed, it should be reviewed and amended or terminated by agreement between governments as soon as possible.
- A good working relationship between the contractor and the implementing agency is essential to ensure the project achieves its goals.
- Risk assessment needs to take account of the physical conditions in which projects are implemented. For example, the leaks in the building housing computer facilities in the Tax Office Project led to delays in implementation.
- When there is a major change in organisational context during the project, the design should be reviewed to ensure its continuing appropriateness. In the Tax Office project there appears to have been no adjustment of project goals or design to take account of the merger between the Tax Office and BCE which occurred in the middle of the project in 1992.

Project Management

- Systems for effective monitoring of the project need to be clearly identified in the project design.
- The project monitoring agency should identify the need for variations in design and standards of output and institute appropriate actions. For the first half of this project it appears that outputs were not certified as being of an acceptable standard or having been completed in accordance with schedules.
- Project reporting should be on a component basis and include both historical data and future projections.
- Project monitoring should include a system for gathering and reporting against performance indicators.

Selection of contractor and technical advisers

Care needs to be taken to ensure that the contractor is a good match in knowledge and skills with the implementing agency.

5 Bureau of Customs and Excise Institutional Development Project

At project completion in 1992, the project goal of improving the capability and effectiveness of the Bureau of Customs and Excise (BCE) operations had by all accounts been achieved. All components had been implemented, with particular success in the area of procedural and systems reform. Processing times were substantially reduced in all operational areas as a result of revised procedures and the introduction of risk assessment techniques.

Of project beneficiaries, customers were being serviced in a more timely manner resulting in speedier revenue collection and fewer defaults. A range of corporate management systems was in place and both the image of the BCE and the confidence of its staff had improved. In 1992, immediately following completion of the project, BCE was amalgamated with the PNG Tax Office to form the Internal Revenue Commission (IRC). This merger, in which the Tax Office was the senior partner, had a rather negative effect on BCE and, consequently, on the sustainability of some project components. This is discussed in more detail below.

5.1 Background

5.1.1 Development context

The social, political, cultural and infrastructural conditions referred to in the chapter dealing with the Tax Project applied equally to the circumstances in which the BCE Project was implemented.

5.1.2 Description of project

The BCE's principal responsibilities include the determination and collection of tariffs and excise in accordance with legislation and the investigation, auditing and compliance actions associated with that collection. The total staff at the commencement of the project was around 250 based in three regions around the country.

A memorandum of understanding was signed in June 1987 committing funds amounting to AUD \$ 3.3 million by the GOA and AUD \$ 0.8 million by the GOPNG over 5 years. The contract to implement the project was awarded to the Australian Customs Service (ACS) of Canberra and the project commenced in September 1987.

The project was completed in July 1992 with the presentation of the project completion report and the signing of a "Letter of Intention" for further Cooperation-operation between the PNG BCE and the ACS. The final project cost for the GOA was AUD \$4.3 million. Estimated cost to GOPNG was AUD \$1.0 million. Total contractor person/months are estimated at 200 for the project, no estimate is available for the GOPNG.

The project had the following goal:

To improve the capability, operations and self-image of the Bureau of Customs and Excise and its staff.

The main components of the project were:

- Core Management Functions: To develop core management functions including the organisational structure, manpower planning, public relations, external linkages and legislative framework;
- Invoice Room Operations: To review and develop invoice room procedures;
- Investigation / Intelligence: To develop commercial and other investigation activities;
- Excise and Warehousing: To develop excise and warehousing activities and procedures;
- Cargo Control and Accounting: To review and develop cargo control activities and procedures;
- Audit: To review and develop audit systems and procedures;

- Management Data Bases: To develop data bases for management information and planning;
- Training: To develop the training unit;
- Passenger Processing*: To review and develop passenger processing procedures; and
- Project Management: To ensure efficient management of the project and achievement of planned results.

* This additional component was approved and added to the project in 1990.

The main beneficiaries of the project were to be the staff and management of the BCE, its customers and the Government. The project was intended to assist:

- staff and management to work in a more effective and efficient organisation with a more positive self and public image;
- customers to receive better service; and
- government to receive greater revenue through improved compliance to tariff and excise laws.

Following the GOPNG request to provide support for the institutional development of the BCE, pre-feasibility and feasibility studies were completed in 1986. The studies identified several factors which restricted the operations of BCE, including outdated organisation structure, systems and procedures, staff capacity and training processes as well as low morale and a poor corporate image.

Inputs & Activities

Project components were, in the main, designed to support specific functional areas. For example, Component 1 was directed largely at the executive levels of BCE's organisation structure and was designed to provide assistance in implementing good human resources management, instituting more effective management and supervisory practices, and developing an enhanced corporate image. Other components focused on the invoice room, warehousing, and a number of key operational functions. In each component however, institutional strengthening was concentrated across four major streams or categories. These were as follows:

- 1. Development of core management competencies and skills;
- 2. Availability of meaningful management information (MIS);

- 3. Review and re-design of existing systems and procedures within nominated functional areas; and
- 4. Formal training to support the above including the development of a skilled and pro-active Training Unit.

In order to focus on the performance of the project in terms of its primary goal of institutional strengthening, the following overview is presented within these four major streams.

1. Development of core management competencies and skills

The project design emphasised strengthening of organisation structure, manpower planning, internal procedures, public relations, external linkages and legislative framework. The Comptroller of Customs was particularly active in his support for, and participation in, this key area of the project.

A new organisation structure was introduced in 1988, and was assessed by the mid-term review in 1990 as adequate for current requirements, as was the work of the BCE working group monitoring effectiveness of the organisation structure. The working group, which comprised representatives of the BCE executive and line management, had been established with project assistance to ensure that the BCE's program of administrative reform was not hampered by structural inefficiencies.

The revised structure introduced the concept of a senior management group and much needed support for the Comptroller. A Customs Management Committee was established and became the key policy making body within BCE. The Management Committee also instituted a corporate planning process with project support and produced a five year corporate plan for the period 1991 to 1995.

With respect to manpower planning however, several systemic impediments to more effective use of human resources were identified early in the project. The most important of these, government housing, was outside the domain of BCE or project management. The lack of government housing in the regional centres had resulted in a concentration of staff at BCE's Port Moresby headquarters and an under-resourcing of regional offices.

Several new functional areas were developed to strengthen management capacity. Creation and staffing of a legal unit, the introduction of a public affairs unit which dealt also with international issues, and the bolstering of staffing and skills in the training unit were designed to maintain improvements.

The Legal Unit, established in 1989, immediately commenced a review of the Customs Act. At the time of the MTR the need for legislative change to support the re-design of procedures was considered to be substantially less than originally envisaged. BCE was developing its General Orders to reflect work practice changes as systems and procedures were reviewed and the open-ended nature of existing customs-related legislation lent itself to this approach. By project completion in 1992, ACS believed that failure to address the legislation had the potential to inhibit sustainability because of the extent of procedural change and the failure of the General Orders amendment process to keep pace. Problems with legislation were also identified by BCE customers surveyed by the evaluation team. To date no replacement legislation has been finalised.

2. Availability of meaningful management information (MIS)

A weakness identified in the design stage of the project was the lack of systematic gathering and reporting of information on the performance of the organisation. A PC-based MIS was established and was used to collect, analyse and report on a limited number of performance variables in the areas of revenue, management statistics and law enforcement. This MIS was used to gather and retain base line information for the project. A PC-based Human Resources system was also introduced during the project leading to an increase in the availability and accuracy of personnel and training records. In addition, the use of PCs for basic word processing was encouraged and increased during the project.

An additional sub-component was included in the project after the mid-term review for the development of a report on 'Future Automation and Computerisation' which was jointly developed by ACS and BCE and completed in 1992.

Review and re-design of existing systems and procedures within nominated functional areas

At commencement of the project, BCE's systems and procedures were assessed as resource intensive, lacking in accountability controls such as audit trails, and did not make use of modern risk assessment techniques. In many areas it was difficult to assess where revenue was being lost by miscalculation or falsification of business records. The industry was also reporting unacceptable delays in clearing goods.

Processing of passengers through Jackson's Airport in Port Moresby was frequently pilloried in the PNG media and contributed to BCE's poor image in the community. The increased use of containers and changes to cargo handling in PNG's largest ports of Port Moresby and Lae was also placing pressure on BCE systems and processes.

Each functionally based component included activities to review and revise systems and procedures, document revised procedures, and provide training to support the changes. With more complex changes, new systems were introduced as pilots in a single location before being introduced nationally. Training was of two kinds technical training in content and supported "hands on" training to increase operator confidence. This "hands on" training was introduced following the second Officer Confidence Survey conducted in 1990. The survey indicated that while the majority of customs officers had a good understanding of BCE systems, many lacked the confidence to apply their knowledge.

Consultation with industry groups occurred during the processes of procedural review, although response to approaches by BCE seeking industry participation was in the main disappointing. Reviews of excise, warehousing and cargo controls did elicit some industry comment and suggestions, primarily from the Port Moresby Chamber of Commerce.

The project also provided assistance with development of, and training in, appropriate risk management techniques and modern audit practices. For example, at project completion, all invoice room entries were being screened using risk assessment techniques, substantially reducing processing times and BCE staff resources in the area. Internal check functions were reallocated to line branches, enabling the Audit Branch to increase the numbers of compliance and field audits. Further, the process of systems review provided a platform for professional development in investigations and the establishment of inter-agency relationships critical to meaningful intelligence gathering both within and outside PNG.

4. Formal training to support the above including the development of a skilled and pro-active Training Unit

The project feasibility study found BCE's training function to be underdeveloped, with no policy direction, a limited corporate focus evidenced by the absence of any training needs analysis. Staff were poorly accommodated, staff records were patchy, and there was a lack of priority for staffing requirements of the Bureau. The training program concentrated on technical training only, and training was not available to all officers but only to those located in Port Moresby.

Given the importance of both management and skills training to institutional development, the project design and implementation documents concentrated on upgrading the skills of BCE training staff, preparation of training materials, needs analyses which reflected future directions of the organisation and the development of annual training plans. In all other project components, training was identified as intrinsic to systems and procedures review and enhanced management and supervisory capacity. The importance of training to the success of this project was reflected in the location of a fulltime training adviser in Port Moresby for the project's duration.

With project assistance, the Training Unit re-structured around two training teams - management and supervision training and technical training. The Director of Training was encouraged to concentrate on training policy and management issues. Training Liaison Officers were also nominated in regional locations to coordinate regional training needs and maintain links with the Training Unit in Port Moresby. GOPNG funded a new training facility which was completed in 1989.

Technical training was developed using formal course structures to deliver integrated programs made up of related topics. Given the location and scale of many of its dispersed operations and the specialist expertise necessary to deliver all technical training, technical training was coordinated centrally through the Training Unit.

A limited training needs analysis with a focus on management skills and relying on self-assessment was undertaken by ACS staff in 1988. While the training function and the skills of training staff improved substantially throughout the project, by 1992 a comprehensive training needs analysis had still not been undertaken.

Management

In addition to a project director in Canberra, two full-time advisers (Team Leader and Training Adviser) were based in Port Moresby for the duration of the project. ACS also seconded a number of short term technical experts to the project as required, to provide technical assistance in functionally based components.

BCE staff, the Project Director, and the PNG-based Project Manager were all involved in the recruitment and selection of suitable short term advisers. All advisers were expert members of ACS and were selected on the basis of technical knowledge, personal skills and potential to adapt to the PNG environment. By all accounts, this careful, participative approach to adviser selection made a substantial contribution to overall project performance.

A participative approach was a feature of all project activity implemented through the involvement in decision making of functional unit managers and, where possible, staff. Regular project reviews were conducted with the active participation of BCE executive management and line managers. The project team, particularly the two full-time advisers based in Port Moresby, developed a close and harmonious working relationship with the BCE executive. This inclusive approach to project management, together with appropriately targeted recruitment, played a major part in successful project implementation.

5.1.3 Situation at end of Project

The project goal to improve the capability, operations and self-image of BCE and its staff was achieved by the end of the project. BCE customers surveyed by the evaluation team, commented on the major improvements to customs processing that occurred during the life of the project. There were certain other variables which may have contributed to this improvement, for example the containerisation of international cargoes and the installation of the computerised (ASYCUDA) entry processing system in 1993. The project's assistance, however, with the review and streamlining of manual systems greatly assisted BCE's capacity to cope with both these events.

With respect to the impact of the project on the main beneficiaries, information on customer service levels is mixed. Slightly more than

50% of major customers interviewed by the evaluation team indicated that there had been significant improvement in customs operations during the project and that this had generally been maintained. Opinions of the remainder ranged from no improvement over the past ten years, including during the project, to deterioration since project completion in 1992. There was also inconsistency in the turnaround times cited for cargo clearance, with airfreight ranging from 24 hours or less to 96 hours and seafreight from two days to a number of weeks.

A limitation to BCE operations is imposed by public service standard hours and the inability of BCE to fund overtime. While customers are now meeting BCE overtime costs to deal with out-of-hours arrivals, the procedures for invoicing these costs need to be documented for all parties. The formation of an active professional association such as is now being discussed, could assist in dealing effectively with this and similar issues as well as providing external pressure for continued performance improvement in BCE operations.

The Invoice Room examiners continue to use risk assessment techniques, introduced with project assistance, to good effect and customers agree that this has had a major impact on reduced turnaround times for both sea and air cargoes. The number of field audits have, however, been severely limited by budget constraints.

ACS adopted a flexible approach to the implementation of the new procedures and demonstrated a willingness to re-design subcomponents and activities to reflect environmental or organisational concerns. For example, when the 1990 officer attitude survey revealed a problem with operator confidence in applying new procedures, additional "hands on" training was developed and implemented within a very short timeframe. This approach contributed positively to both project impact and sustainability.

The impact of the project on the remaining beneficiaries, the management and staff of the BCE, has been much more limited. The merger with the Tax Office in 1992 resulted in changes at the senior management level. The commitment exhibited by the Comptroller of Customs and his management team was commended by the mid-term review and was identified in the project completion report as a key factor in the success of the project. A similar level of commitment has not been apparent since the merger of BCE with the Tax Office to form the Internal Revenue Commission. In the five years since the amalgamation with the Tax Office there has been a reduction in committed management at senior and middle levels within BCE with a resultant lowering of morale among the organisation's staff. This may be a contributing factor in the poor motivation of operational staff mentioned by some BCE customers. This lack of motivation, reductions in budget suffered by all GOPNG agencies and consequent limitations on travel and training budgets have meant that many of the management systems established with project assistance are no longer in place. Systematic field audits and the training for, and conduct of, investigations in locations other than Port Moresby, are only two of the areas affected. The MIS has not been functioning since 1992 although reportedly, there have been recent attempts to use it to collect basic performance data. No corporate plans have been produced since 1991.

A major component of the project was the establishment of a training unit with the expertise to deliver training in management and supervision and to develop and coordinate technical training. With the amalgamation of BCE training into the staff Development Unit, there has been a shift of emphasis in the approach to training. Technical training is now solely the responsibility of the line area concerned while the Staff Development Unit delivers generalist skills programs such as basic supervision, report writing and presentation skills. The delivery of technical training to an agency as dispersed as BCE presents major problems in the face of substantially reduced travel and training budgets. Even within the Port Moresby Invoice Room, approximately half the staff have not received formal training in the relevant procedures. There is little doubt that unless the issue of technical training is addressed soon, gains made with project assistance will be lost.

5.2 Outcomes

5.2.1 Financial Outcomes

Ongoing costs associated with project initiated activities are the cost of maintaining the training facility in Port Moresby (now closed), travel to support technical training, field audits and investigations in the regions and the recurrent costs associated with maintaining the Public Affairs and Legal Units and the MIS. The lack of available funds is due in part to the fact that the IRC's priorities do not include an emphasis on training and also to GOPNG budget constraints.

5.2.2 Economic Outcomes

The underlying assumption of the project design that a more efficient and effective BCE would result in GOPNG receiving greater revenue from improved compliance with tariff and excise laws has been realised. Changes in the PNG economy make it difficult to ascribe the increase in revenue directly to the project.

5.2.3 Institutional Outcomes

While the capacity of the organisation was undoubtedly enhanced by the project, project outcomes were constrained, and in many ways subsumed by, the more immediate impact of the amalgamation with the Tax Office to form the IRC.

5.2.4 Outcomes for women

The mid-term review noted that despite a male-dominated history, women had done relatively well in BCE since their first recruitment in 1976 and that the project was consciously fostering the merit principle in recruitment and promotion procedures. Further, a number of the short term advisers selected by ACS in consultation with BCE, were women who provided valuable role models for female Customs staff during their work with the project. At project completion 21% of BCE staff were women, many of them in middle management positions.

5.2.5 Performance of management

The commitment to improvement by BCE management, particularly by the Comptroller of Customs, and the leadership he displayed throughout the project, made a significant contribution to its success as did the highly participative approach of ACS as managing contractor. The involvement of both organisations in the selection of short term advisers is an example of how closely the two organisations worked together and of their mutual respect. The expertise of the contractor in customs administration was also an important factor in establishing this relationship.

The lack of focused management since the merger with the Tax Office has, in the opinion of the evaluation team, limited the sustainability of project outcomes.

5.2.6 Benefit cost analysis

The VIs for project goals were 'correct' (increased) revenue, reduction of skills deficit and faster service. It is not possible to

substantiate the contribution of the project to 'correct' revenue collected. There are no records of skills deficit and service timing records are no longer maintained. In addition, project cost information was not reported on a component basis. Therefore, insufficient data is available to complete a cost benefit analysis.

5.3 Sustainability

The project demonstrated the characteristics of an appropriate IS project in both its design and implementation. Its design recognised the importance of management and organisational issues such as staff morale, in improving performance by the inclusion of a component to strengthen core management functions. The importance of the organisation's capacity to develop management skills at all levels and to deliver high quality technical training was also acknowledged in the PDD.

Commitment of management and staff, careful selection of technical assistance personnel, an understanding of the national and BCE environments, and clear performance targets characteristic of successful IS projects, were all features of project implementation. The managing contractor, ACS, had expertise in customs administration and a good understanding of the challenges to be met in achieving the project goal. ACS remained responsive to BCE needs throughout the project. For example, they introduced more on-the-job training in response to an officer needs survey conducted in 1991.

The above features all assisted with ease of implementation and the achievement of the project goal and outcomes. The project completion report in discussing sustainability, was concerned primarily with those operational areas where systems and procedures had been revised and in many cases totally re-written. In addition to the extent of the changes introduced with project assistance, these functions commenced automation with the installation of the ASYCUDA computer system in 1992. ACS was understandably confident that the management commitment to project outcomes demonstrated throughout the project, together with the emerging skills of BCE's middle managers, would ensure sustainability of the remaining IS components.

Perhaps ironically, the reverse has been the case. Following the merger with the Tax Office, organisation structures and policies changed. In the absence of focused management, initiatives introduced during the project have lapsed. Management

information critical to effective control is no longer available from field audits and investigations, liaison with external agencies is limited, and the MIS no longer reports on performance variables. Technical training is under-resourced because of GOPNG budget cuts and remains a major problem in locations away from Port Moresby. Morale, particularly of BCE middle managers, is low.

Revised systems in the invoice room, passenger processing, cargo control, excise and warehousing continue to operate effectively, supported by the continuing implementation of the ASYCUDA system. Procedures, some of which are still manual, are followed and there appears to be a sound understanding of the process as a whole. Risk management techniques remain in use internally, although the inter-departmental committee, which shared information on risk, no longer meets.

A sampling of BCE's more significant customers based in Port Moresby, confirmed that, during the project, there were substantial improvements in processing and BCE operations generally. These improvements have, they say, been sustained over the last decade. The same customers reported that the changes have not been sustained to a similar degree of consistency outside Port Moresby. Customers have identified a number of areas as requiring further work including the urgent update and simplification of the Customs Act, General Orders and Regulations.

Customers also identified a continuing need for technical training. BCE managers and staff who participated in project-supported training are generally confident and knowledgable about their work while new staff who have not undergone training are perceived as constituting one of the reasons for delays in processing and customs clearances.

It is the view of the evaluation team that sustainability in customs operations remains relatively high, although skills are starting to decline as new staff join the organisation. Additional formal training will become increasingly important to maintain performance. Sustainability will also be dependent on the revision of manuals as more procedures are automated and the updating of the relevant legislation and regulations.

5.4 Assessment of strengths and weaknesses

Strengths

- The Australian Customs Service understood the customs context organisational, national and international;
- BCE management was strongly committed to the project;
- The contractor used a consultative/participative approach;
- Experienced and appropriately qualified advisers deployed by the contractor in consultation with BCE;
- The implementation of the project focused on performance indicators and management of performance; and
- Development of relevant procedures, training materials and training programs.

Weaknesses

- The merger of Tax and BCE into the IRC diverted BCE's attention away from some of the achievements of the project; and
- IRC funding limitations have restricted training activities in BCE since the merger.

5.5 Lessons Learned

Organisational and environmental context of project

Major events outside the control of the implementing agency or the contractor can adversely affect the organisation. The merger of BCE with the Tax Office to form the IRC following the completion of the project in 1992 appears to have affected the sustainability of project achievements.

Design Issues

- Involvement of all stakeholders should be incorporated in all project design studies. In this project BCE sought the project and was committed to a successful implementation.
- Verifiable indicators should be clearly related to project outcomes and be measurable. Sufficient data should be collected to allow measurements. In this project, while some verifiable indicators related to the project goal were only

indirectly linked to it, component and sub-component indicators were appropriate.

- In IS projects, those components targeted at strengthening management capacity need to be considered as longer term initiatives requiring post-project reinforcement.
- Project design may be strengthened by recognising the influence of external stakeholders on the performance of the implementing agency. In this project the Port Moresby Chamber of Commerce provided feedback on changes to procedures.

Implementation

- Training programs based on work procedures which include both classroom and on the job training contribute to the sustainability of work performance. However, the development of operational staff needs to be continuous to increase the probability of sustained performance.
- A flexible approach to modifying contractor methods based on emerging organisational needs will facilitate the achievement of project goals and outcomes.
- A participative approach by the contractor in all aspects of project implementation increases commitment and project ownership at all levels of the organisation. During the BCE project the executive, line managers and staff were all involved in decisions about organisational change.

Selection of contractor and technical advisers

- Care needs to be taken to ensure that the contractor is a good match in knowledge and skills with the implementing agency. In this project ACS had expertise in customs administration and a good understanding of the challenges to be met.
- Implementing agency/contractor relations are enhanced by a participative approach to adviser selection. BCE was involved in the selection of the short term technical advisers for the project.

6 Community Teachers' College Lecturers' Professional Development Project

The project goal, to improve the educational standard of the CTCs through the professional development of their teaching staff, was only partially achieved, primarily because the project design was overly narrow. Both components of the project were implemented successfully following changes to the in-country workshops. Community Teachers College's (CTC) lecturers and other major stakeholders were actively involved in implementation of the academic course work and workshop programs throughout the project and demonstrated a high level of commitment to project outcomes. Factors which militated against full achievement of the project goal are discussed below.

6.1 Project Overview

6.1.1 Development context

Community Teachers Colleges in Papua New Guinea provide teacher training for all primary school teachers. Primary schools have traditionally been responsible for Grades 1 to 6. Following the reform of the education sector commenced in the early 1990s, they now offer Grades 7 and 8. The addition of Grades 7 and 8 to primary level has increased the demands on primary teachers for higher levels of subject knowledge, particularly in areas such as Science and Mathematics. During the 1980s, a number of reviews were conducted by GOPNG to identify ways to improve the standards at CTCs and the quality of teachers available to the education system. A key to improving educational standards in community schools was considered to lie in raising the professionalism of teacher educators who would in turn, upgrade the skills of the primary teachers entering the system.

6.1.2 Description of project

The project commenced in 1990 and was completed in 1995 and had the following project goal:

To improve the educational standards of the Community Teachers Colleges through the professional development of their teaching staff.

The planned GOA contribution as outlined in the design documents was \$2.24 million, with the final figure being \$ 3.2 million which included a twelve month extension to Component 1. GOPNG detailed costs are not available but included the local component of workshops and continuation of the payment of the lecturers salaries and other benefits in support of families who could not travel to Australia and live there during the period of training. The implementing agency for the GOPNG was the National Department of Education (NDOE). The Brisbane College of Advanced Education which amalgamated with the Queensland University of Technology (QUT) in 1990 was appointed as contractor for the project in 1989.

The objectives of the project components were defined as:

- Academic Coursework in Australia: To raise the ability and self-confidence of serving and associate lecturers through a program of course work at an Australian tertiary institution;
- Campus and Regional Based Workshops: To prepare CTC serving and associate lecturers in English language prior to their undertaking course work in Australia and to support their development of practical experience; and
- Project Administration, Management and Implementation: To ensure effective project implementation.

AusAID's intention was to consolidate and build on a number of earlier AusAID projects which, over the years 1973 to 1989, sponsored selected CTC lecturers to attend teacher education programs at the Canberra College of Advanced Education. The main beneficiaries of the project were the lecturers, the CTCs with improved quality of staff, the trainee teachers, and teachers who attended in-service programs. Participants were drawn from two main groups: lecturers or associate lecturers who did not have a B.Ed and full-time students enrolled in the B.Ed (tertiary) course at UPNG.

The Project Review and Design Study (1989) found that while earlier programs of study had been of significant assistance to the professional development of the lecturers, they had not, in general, influenced the capacity of the lecturers to communicate their newly acquired knowledge in the classroom. The Study stressed the need for any future project to ensure that returning candidates receive additional practical training

in-country to support and enhance their formal overseas training and to help them have a positive affect on their colleges.

Inputs & Activities

The project consisted of two main components. The first of these involved academic course work in Australia at the Queensland University of Technology and the second was a series of in-country workshops designed both to prepare lecturers and associate lecturers for their Australian studies and to sustain their professional development once they had returned to PNG.

Component 1: Academic Course Work in Australia

As part of the awarding of the Bachelor of Education degree by the University of Papua New Guinea (UPNG), lecturers and associate lecturers travelled to study at the QUT for one year. Individual programs of study were developed for each student depending on his or her subject specialisation and skills development needs eg. research skills. During this course work year, several students amended their study programs as a result of academic difficulties in their subject specialisation. The nett effect of these changes resulted in fewer graduates with subject specialisations, especially in science and mathematics, and a larger number of education studies graduates than originally planned.

In all, seventy-six lecturers and associate lecturers studied at QUT of whom 13 were women (17%) ie the participation by women in the project was higher than the proportion of women lecturers employed by the CTCs (15%). The overall performance of all students was extremely good, with only one returning to PNG prior

to the completion of the academic year. This is a success rate of over 98%.

In response to the findings of the Project Review and Design Study in 1989, QUT and UPNG developed cooperative-operative "Preparation for Study at QUT" programs. QUT also identified the need for, and established through its Project Management Group, considerable welfare and network support for students while they were in Australia.

The mid-term review of the project found this component to have been extremely successful, with the few minor problems brought to its attention having been identified and put to rights very quickly by QUT.

Several participants in the B.Ed. (In-Service) expressed frustration at not being able to implement ideas developed during their QUT year because the program structure required a further year of study at UPNG before they returned to their colleges. A more appropriate program structure, particularly for those participants who had been working as lecturers, might have been to undertake the UPNG year before undertaking study in Australia. This approach may have served the dual purpose of dealing with the frustrations expressed above and managing the participants' return to study in their own cultural environment.

During the fifth year of the project, a further group of CTC staff who would need assistance in gaining their B.Ed., were identified. GOPNG made a successful application to AusAID for a one year extension of the project. This extension was for overseas study only, and an additional thirteen lecturers attended QUT in 1995.

Component 2: Campus or Regional Training in PNG

The rationale for this component in the original design document was two-fold - to prepare lecturers and associate lecturers for study in Australia, and to improve their confidence in teaching in English and in practical course writing and development. The English language workshops were mandatory for those participants about to undertake formal training at QUT. An additional objective of the program of in-country workshops was the strengthening of lecturers' content knowledge and subject specialisation.

The mid-term review in 1992, and the External evaluator appointed by QUT (1995), noted that the curriculum development and

pedagogical skills workshops in particular seemed to have made a significant contribution to improving lecturers' skills. This comment was also supported by recent teacher graduates and others within the NDOE.

The project design document set a target of fourteen workshops in English language, curriculum development and pedagogical skills, science, mathematics and education studies. It was originally intended that a number of each of the workshops be conducted regionally to maximise attendance. In 1991 however, primarily to reduce costs but also because of some differing views on workshop content, the workshops were changed to a central location and run on a national basis.

The contractor adopted a participatory approach to project management as evidenced by its willingness to cooperate closely with stakeholders. In the early stages there were differing views between the implementing agency and the contractor about the purposes of the workshops, particularly those in the science/mathematics specialisation and English language. This divergence of views affected both workshop design and selection of suitable participants. The contractor believed its brief to be to provide support for a professional development program while NDOE wanted the workshops to enhance program development skills and to produce program materials. Following identification of this issue by the midterm review, and extensive discussions among the stakeholders, the issue was resolved by establishing a planning process where NDOE, UPNG and the Project Director from QUT met annually to develop and agree on the coming year's in-country workshops.

Participants said that the workshops had a very positive effect on their skill levels although almost 50% of the lecturers and associate lecturers who studied at QUT did not attend any of the workshops other than those which were mandatory for their Australian study programs. On the other hand, seventy-one lecturers from CTCs who did not undertake academic course work in Australia, attended one or more workshops.

Fourteen workshops were concluded between 1990 and 1994, with special arrangements made for lengthened induction programs for the 1990 and 1995 intakes to QUT as they were unable to participate in "Preparation for Study at QUT" workshops.

Management

Considerable effort seems to have been made by the contractor in the use of participative decision making for all aspects of the implementation of the project and this appears to have been successful. A high level of commitment from the contractor, the NDOE, principals of the CTCs and the lecturers to the successful implementation of the project was apparent.

Evidence of the success of this cooperative approach to project management was the GOPNG-funded conference and workshop held in Goroka at the completion of the project in July 1995 to discuss project sustainability. Twenty-two recommendations related to ongoing appraisal of, and support for, project participants and the implementation of professional development networks were endorsed by the conference.

6.1.3 Situation at the end of the project

Although project outcomes as identified in the project implementation document were undoubtedly achieved, the impact of the project on the primary education system as a whole is much less clear. The assumption underlying support for the professional development of CTC lecturers was that this would lead to sustained strengthening of the CTCs, better quality primary teachers and, through them, to a more effective and efficient primary education system. The VIs were measures of, for example, courses completed, and were unrelated to the project goal. Available information on retention of project participants in the education sector is included in Annex 6 although there are no identifiable trends.

The impact of the project on the wider education system is difficult to assess for a number of reasons. Amongst those are the number of other variables affecting the quality of primary education and the time required for primary teachers, trained by project participants, to enter the primary school system, develop confidence as new teachers and have an impact on their pupils and colleagues.

Early in the project, the duration of training given to trainee teachers at the CTCs was changed from 2 to 3 years. This created a demand to change the curriculum, which in turn created pressure to change the content of in-country workshops to curriculum preparation. The project design was not formally reviewed or adapted to cater for this change.

At project completion the lecturers, and to a lesser extent the CTCs where they taught, were the only clear beneficiaries. As the project was progressively implemented and the proportion of qualified lecturers in each college increased, it is reasonable to suppose that the quality of teaching improved. There is, however, neither quantitative or qualitative data available which relates to individual lecturer performance following their return from their studies. Some anecdotal evidence exists of other CTC staff undertaking further studies and in-service programs prompted by newly qualified colleagues. Recently graduated primary teachers indicated that lecturer competence and motivation increased during the project, particularly following their return from OUT. Reports from the mid-term review and OUT's external evaluator concentrate on achievement at the level of project component outcomes, that is, the successful delivery of education and training in both PNG and Australia.

With respect to the present evaluation two years after project completion, there is anecdotal evidence from primary school inspectors, headmasters and headmistresses that recent graduates of the CTCs are better prepared for their primary teaching role than their predecessors. Content knowledge, as a general rule, is of a higher standard and more use is made of a diverse range of teaching aids and learning materials. Recent graduates also have the range of knowledge essential to teaching all grade levels including Grades 7 and 8.

Conversely, in the opinion of headmasters and headmistresses, recent CTC graduates appear to be less well grounded in the practical aspects of classroom control and management than former first and second year primary teachers, possibly because of a greater emphasis on academic content in their training.

A number of variables other than better qualified CTC lecturers may have contributed to this perceived improvement in primary teacher graduates. Apart from the upgrading of the two year primary teaching certificate to a three year diploma, considerable attention is now being paid to the selection of students to undertake teacher training, with a considerable push at the national level to accept more Year 12 students instead of the traditional entry level at Year 10.

6.2 Outcomes

6.2.1 Economic Outcomes

It was assumed that improving lecturer capabilities would be translated to improved primary teachers and therefore improved students. The improved students would have a positive economic impact. These relationships seem intuitively correct, but it is impossible to establish a causal relationship between the variables.

6.2.2 Institutional Outcomes

Both study in Australia and the in-country workshops appear to have contributed to the capacity of the CTCs as evidenced by the involvement of lecturers in program development within their colleges and the improved quality of CTC graduates.

6.2.3 Social and Cultural Outcomes

The project has no measurable impact on the social or cultural fabric of PNG other than to contribute to the quality of education available in the nation's primary schools.

6.2.5 Outcomes for women

Of the 76 lecturers and associate lecturers who completed course work in Australia, 13 or 17% were women because NDOE, UPNG and the contractor QUT gave considerable attention to the inclusion of women in both components of the project. In 1997, women made up 15% of the PNG citizen lecturing staff at CTCs. The welfare network established by QUT to support project participants made special provision for the needs of women students with family responsibilities. NDOE officials told the evaluation team that the special welfare provisions meant that an increased number of women were able to benefit from the project and, in particular, from study in Australia.

6.2.5 Performance of management

The highly participative management of the project by QUT engaged all direct stakeholders in a range of decision making processes. The process established to resolve potential conflicts related also to the in-country workshops. The willingness of NDOE to fund a final seminar/workshop for all stakeholders including CTC principals, at the conclusion of the project are good examples of inclusive management. This is not surprising because NDOE normally uses a consultative approach to management and policy issues. This appears to have been the organisation's chosen operating style for many years.

The project included neither components nor activities designed to strengthen the management capacity of the CTCs.

6.2.6 Benefit cost analysis

Project objectives were related to outputs, such as participation in coursework and completion of coursework and no quantifiable outcomes related to institutional performance were identified. In addition, component cost information is not available. Therefore, there is insufficient data to complete a benefit cost analysis.

6.3 Sustainability

While the project's primary goal sought to strengthen the educational capacity of CTCs through the professional development of their lecturers, a narrow focus on formal education and training may have detracted from sustainability. This also meant that the project was in no real sense an institution strengthening project as characterised in Section 1 of this report.

Examples of other interventions which could have been used, are those which would have enhanced college management and administration, the development of professional associations, the provision of teaching materials and other resources, and the development of appropriate welfare and student services. The limited, technical approach taken to capacity building by this project has implications for its sustainability because continued performance is dependent on individual lecturers' motivation to seek further professional development opportunities.

A measure of sustainability for both project components is the degree to which participants engage in ongoing professional development activities. The evaluation team noted there was limited involvement in the project's program of in-country workshops by some participants on their return from academic course work in Australia. Unfortunately, there is no national program of refresher training or professional development for CTC lecturers in place, largely because of PNG's financial situation and the significant funding cut suffered by NDOE in 1997.

As a result of the seminar held at Goroka in July 1995 to examine sustainability issues, professional development coordinators were nominated in each college. This role appears to have lapsed in a number of colleges in the absence of college management support, resources, and a coordinated national program. Some CTCs have introduced limited staff development programs at the college level, usually linked to development needs identified by the appraisal system.

Similarly, NDOE wishes to extend and develop the program of workshops established under the project, acknowledging their value for both curriculum development and professional development purposes but is limited by funding constraints.

In the project's design phase, an important principle underpinning sustainability was identified as the establishment and maintenance of professional networks among CTC lecturers once they had returned to their colleges. QUT invested considerable energy and some resources in supporting these networks to the extent of purchasing facsimile machines for all CTCs, and the mid-term review remarked in passing on the benefits of the extended professional networks it observed.

Few of these remain active. Two reasons for this were advanced the restrictions placed by budget cuts on national and inter-college activities including limitations on travel, and a cultural reluctance to share or exchange information with colleagues. Information is seen as conferring power and prestige on the person who holds it. While the first of these could not have been predicted, it would have been useful for the latter to have been identified during the design of the project. Another factor which influenced the environment into which the project was implemented, was the power struggle between the University of Papua New Guinea and NDOE over control of resources. While this dissension was peripheral to the project, it informed the very important relationship structures surrounding the project. OUT seemed either unaware of the conflict, or underestimated its effect on the project. The conflicts between the two institutions may have been reflected in some of the disagreements over the content and direction of the project. It is to OUT's credit that they retained a flexible approach which, in the end, resulted in the realisation of the project goal.

There is strong anecdotal evidence that both the quality of teaching in the CTCs and the calibre of recent graduates have improved. Sustainability of these improvements is dependent on the motivation of the lecturers to seek out further development opportunities and GOPNG funding for workshop and staff development programs at the national level.

6.4 Assessments of strengths and weaknesses

Strengths:

- ⊕ There was strong commitment by NDOE;
- There was a participative approach to project design and implementation;
- QUT was an appropriately experienced and qualified contractor;
- The workshops were specific to the needs of participants;
- Support systems for lecturers studying in Australia were very effective; and
- QUT employed an external evaluator

Weaknesses:

- Components used a limited number of IS interventions, therefore achievement of the project goal was limited;
- The project design did not incorporate plans to reinforce or support project gains following project completion;
- Some cultural variables were not taken into account; and
- Internal PNG political issues were not always understood eg. conflict between UPNG and NDOE over issues external to the project.

6.5 Lessons Learned

Organisational and environmental context of the project

Cultural and organisational factors in both the project environment and in the institutions need to be taken into account in project design and implementation. In the CTC project the development of information sharing and support networks was not recognised as a cultural variable until the end of the project. Comprehensive pre-departure familiarisation briefings may have assisted the Australian advisers to the Tax Office Project to a greater understanding of the cultural backgrounds of their PNG counterparts.

Design Issues

- The inclusion of multiple IS components increases the probability of achieving project outcomes and sustainability. In this project components to strengthen CTC management and administration, increase research facilities at CTCs and assist in establishing a professional association for teacher educators would have strengthened the effectiveness of the project.
- Werifiable indicators should be clearly related to project outcomes and be measurable. Sufficient data should be collected to allow measurements. In this project indicators were "policies and programs" which were neither defined nor measurable.
- Activities within individual components need to be in a logical sequence to improve probability of project success. In the CTC project the year's study at UPNG occurring before study in Australia may have improved their results at QUT.

Implementation

- A participative approach by the contractor in all aspects of project implementation increases commitment and project ownership at all levels of the implementing agencies. During this project all stakeholders participated in decisions concerning project activities.
- When there is a major change to organisational context during the project it should be reviewed to ensure its continuing appropriateness. In the CTC project there appears to have been no formal recognition that the change in curriculum from two to three years may have had an impact on project outcomes.

7 Conclusion

Although all three projects were classified as IS projects, each of them was very different from others in the cluster, even in their initial design. The CTC project focused primarily on the development of individual college lecturers while the BCE project addressed core management competencies across the organisation as a whole as well as the redesign of operational systems and procedures. The project in support of the Tax Office was both diverse and wide-ranging in its original form but as a result of incorrect assumptions in its design and problems with implementation, was limited to two major components. One of these components, development of an in-house computer facility, was highly technical and only indirectly linked to IS.

As the projects were implemented, the differences between them became more pronounced. Therefore, to provide a framework for the evaluation and to assist with a meaningful comparison of lessons learned, the evaluation team considered each project against several characteristics of successful IS projects identified by the OECD⁴. The team also took into account the potential effect of each project on the major beneficiaries identified in the respective PIDs.

Lessons learned which are project specific are included in the above discussion of each project although all can be generalised to apply to the design and implementation of other AusAID projects. The evaluation team considers, however, that the following areas are of particular importance and are well illustrated by these three projects.

With respect to contractor selection, care needs to be taken to match bidders' experience with the needs of the implementing agency and to take into account the views (where known) of the implementing agency about the bidders.

With respect to project design, key lessons include the need for more creative use of all stakeholders in project activities to provide a forum for discussion of relevant issues and to assist in the measurement of changes to institutional performance. An industry association or professional standards group is also likely to maintain pressure on the implementing agency following project completion and so increase the probability of sustained performance. In the CTC

⁴ Evaluation of Programs Promoting Participatory Development and Good Governance: Synthesis Report; DAC Expert Group on Aid Evaluation; OECD ibid p 47

project, for example, project assistance to establish a professional association for teacher educators would have served to provide a forum for research once participants had returned to their colleges and also encourage the further development of national networks.

Verifiable indicators should be clearly related to project outcomes and be measurable. In the projects being evaluated, VIs in the CTC project could not be related to project outcomes and within components, were neither defined nor measurable. In the Tax Office project, revenue and productivity indicators were set but were not directly related to project outcomes, and were not clearly defined or measured during the project. Only in the BCE project were component and sub-component indicators appropriate and actively used as a management tool by both the BCE executive and the contractor to monitor and improve the organisation's performance.

Components seeking to strengthen management capacity in IS projects need to be considered from the outset as longer term initiatives which will require post-project reinforcement. In the BCE project, such was the level of BCE commitment to management practices introduced by the project, that discussions on sustainability at project completion centred on the organisation's ability to maintain performance at the operational level. In the face of extensive organisational restructuring however, management competencies proved to be the more fragile and would have benefited most from support following project completion.

Training, particularly technical training, should be integrated into all components of IS projects rather than being separated out into a training component. That having been said, the establishment of a centralised training unit can assist with the development and standardisation of materials and the conduct of training needs analyses during the life of the project. The differing approaches adopted in the Tax and BCE projects indicate the importance of technical training as an intrinsic part of procedures review and redesign. It is the view of the evaluation team that improvements in customs operations would not have been sustained to the level they have been if technical training had been divorced from the process of procedures review.

Finally, in comparing the three projects against the characteristics of successful IS projects it is clear that the more those characteristics are present in project design and implementation, the greater the probability of both successful implementation and sustained

performance by the implementing agency. It is also clear, however, that the presence of these factors during the project may not be sufficient to ensure sustainability.

These projects clearly illustrate the importance of post-project support to IS projects. The impact of external events, the ongoing commitment of at least some individuals to the changes and the ability of the organisation to attract and retain resources and to apply them to reinforcement strategies such as regular technical training, have all influenced the sustainability of these projects. Possibly the most important lesson from this cluster evaluation is that IS project designs must retain the flexibility to respond to changes in the external environment and thus promote the sustainability of project benefits beyond the life of the project.

Appraisal Document: November 1987	: November 1987		
Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
PROJECT GOAL			
To improve the operational and institutional capacity of the Taxation Office to administer the Taxation Act in an effective and efficient manner as a basis for increased revenue collections through increased compliance with the tax laws.	 Improved productivity of staff Increase in taxation revenue (corrected for rate changes) Retail sales tax collected on budget 	 Taxation Office statistics Annual Report Comparison with prior years and budget 	 PNG government commitment to asking necessary legislative changes No organisation changes to the detriment of sector and project Availability of trainers/advisors in a timely manner. Shortages of qualified prosecution officers in Taxation Office overcome Ability of police to serve default summons in required time.
PROJECT PURPOSE / ACTIVITY			
1 Provide for the administrative independence of the Taxation Office	 Internal Revenue Administration Act promulgated Budgetary stability Control over recruitment, accommodation and salary levels Control over legal processes Autonomy of ADP operations 	 Legislation passed by PNG Parliament Dept. F & P influence reduced to annual budget only Speedy return of dishonored checks Independence from PSC Reduction in delays in recovering outstanding tax Independence from NCC Operational downtime reduced 	IRA Act passed by PNG Parliament
 1.1 Design and draft Internal Revenue Administration Act (IRAA) following a review of Taxation and Customs Office responsibilities 	Organisational autonomy of TO in areas of recruitment, accommodation and salary levels; legal processes; and ADP operations	IRA Act passed by parliament	IRA Act passed by parliament

Annex 1: Logical Framework: Papua New Guinea Taxation Office Institutional Development Project:

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
 1.2 Assess impacts of IRAA on TO structure and design and implement revised organisation structure to accord with IRAA (Pre ADP) 	 Organisation structure which is in line with actual arrangements, and has staff support 	 Observation and interviews 	
1.2.1 Draft required duty statements	 Duty statements 	 Documentation 	
1.2.2 Update procedure manuals and provide operating manuals as required	 Complete and current set of manuals 	 Documentation 	
1.3 Revised organisation structure in line with installed ADP operation	 Organisational structure which is in line with ADP arrangements an has staff support 	 Observation and interviews 	
1.3.1 Revised duty statements	 Duty statements 	Documentation	
1.3.2 Revised procedure manuals and provide operating manuals as required	 Complete and current set of manuals 	 Documentation 	
2 Definition of the tax base			
2.1 Study Taxation Act			
2.2 Collect information of PNG economy and determine amount of non-PAYE income	 Tabulation of income estimates 	 Documentation 	
2.3 Determine income assessed by PNGTO and estimate income not being assessed	 PNGTO assessment figure Estimates of shortfall 	RecordsDocumentation	
2.3 Determine income assessed by PNGTO and estimate income not being assessed	 PNGTO assessment figure Estimates of shortfall 	 Records Documentation 	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
3 Determine priorities for and implement ADP systems, as well as specify and install in-house computer facilities to support the above	 Agreed implementation plan for the introduction of ADP systems 		
3.1 Identify all systems to be computerized, their priority approximate duration, PNGTO staff affected and training needs	 Details of order, timing ,duration and internal and external inputs required 		
3.1.1 Establish Steering Committee (Senior PNGTO management and consultants)			
3.1.2 Identify a representative, non- critical system for pilot implementation			
3.2 Implement pilot ADP system			
3.2.1 Establish Project Steering committee• Consultants and PNGTO personnel in affected area	 Project steering committee established 	Observation	
3.2.2 Prepare project implementation plan	 Plan prepared 	Documentation	
3.2.3 Specify and procure necessary hardware for pilot scheme	Hardware specificationHardware installed	DocumentationObservation	
3.2.4 Provide procedures, documentation and training and install system	 System/procedures document Well integrated and functioning unit 	Documentation	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
3.2.5 Review and revise implementation procedure on basis of pilot system	 Implementation of plan finished 	Documentation	
3.3 Implement other ADP systems according to priorities established by Steering Committee	 Orderly implementation of ADP systems with minimum disruption of T. O. activities 	 Lack of disruption 	
3.3.1 Determine training needs to implement ADP system	 Tabulation of training needs 	 Documentation 	
3.3.2 Determine existing and future computer hardware requirements for each system	 Tabulation of training needs 	 Documentation 	
3.4 Specify, purchase and install in- house: necessary computer hardware and peripheral to support the ADP systems	 Hardware and peripherals installed 	 Observation 	
3.4.1 Develop and agree tender specification for the computer hardware	 Agreed tender specification 	 Tender documentation 	
3.4.2 Determine physical siting, air conditioning and other requirements for hardware	 Site installation plan 	 Documentation and drawings 	
3.4.3 Call Tenders	 Tender documents, letters, advertisements 	 Documentation 	
3.4.4 Evaluate tenders	 Tender evaluation report 	Documentation	
3.4.5 Let contract for base machine and peripherals	 Purchase order 	Documentation	

2 2 2 2			
Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
3.4.6 Prepare site for hardware	 Physical preparation of site 	Observation	
3.4.7 Install and commission hardware	 Hardware installed in operation environment 	Observation	
4 Institutionalise training and staff development system	 Fully staff training unit with planned training programs an profiles of training needs 	InspectionPrograms	
 4.1 Develop training unit (staffing, training needs analysis, manuals, coursed, monitoring, etc.) 	 Functioning training unit 	 Inspections 	
4.2 Identify trainees for fellowships at Australian T.O. from investigations assessing and field audit areas (4 per year for 5 years)	 Trainees identified 	• Records	
4.3 determine and arrange training requirements necessary for the effective implementation of the ADP systems	 Training programs 	 Observations 	
4.4 Develop and conduct courses to upgrade supervisor skills	 Numbers of supervisors attending courses 	Records	
4.5 Co-ordinate, to maximum effect, the training activities of the Supervisor and 3 senior Investigation Officers from the Australian T. O.	• Trainers fully trained	• Observation	
4.5.1 Develop in association with the trainers, a specific tailored training program for the trainees	• Existence of training program	• Records	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
4.5.2 Co-ordinate in association with the English Language training	 Numbers of staff attending courses 	 Records 	
5 Assistance with Sales Tax implementation	• Effective and efficient procedures to collect and process Sales Tax implementation	 Records of Sales Tax collection compared with estimates of Sales Tax payable 	
5.1 Design procedures for processing of returns and collection of the tax	 Existence of procedures manual 	 Records 	
5.2 Design of inspection / investigation procedures to ensure compliance with Sales Tax laws			
5.3 Recruit and train staff for the performance of the functions in 5.1 and 5.2	 New, trained personnel 	 Records, observations 	
6 Project management, administration and reporting			

	8,261 3,212 5,049 22 9 13 635 110 101 17 17 2 89% 5.8 11.1	9,629 4,646 24 11 12 741 104 18 16 2 89% 5.8 9.9	9,350 3,363 5,987 26 10 10 18 584 16 15 58 15 5.6 5.6	8,909 3,245 5,664 10 17 524 69 57 18 18 18 2 2 3.8 7.0	10,803 5,111 5,692 31 15 16 675 87 16 13 3 81% 4.9 4.9	78 117 14 5.6	60% 60%	3 9					Total Number of Assessments Taxpayers - Companies Taxpayers - Others Assessment staff Company Assessment Other Assessment / Staff Number of audits completed Number of audit cases on hand Audit staff - Total Citizen Non-citizen % Localised Completed audits per staff Total audits per staff
236%	924	678	636	614	446	337	308	391	331	272	239	243	Total
421%	417	257	272	260	67	0	0	66	63	35	23	17	MRSF Taxes
181%	38	36	34	31	27	25	27	21	20	15	12	17	Other taxes
378%	34	28	27	24	24	16	0	9	œ	9	7	6	div. withholding tax
133%	118	66	109	110	92	80	95	68	83	66	52	70	companies
183%	317	258	194	189	236	206	186	173	157	147	145	133	individuals
173%	469	385	330	323	352	312	281	271	248	222	204	209	(excl mining)
													PNGTO (Kina millions) Taxes: income & profit
% Change from 1989 to 1996	Prelim 1996	1995	1994	1993	1992	1661	1990	9861	1988	1987	1986	1985	ltem

ltem	1985	1986 1987	1987	1988	1989 1990 1991 1992 1993	1990	1661	1992	1993	1994	1995	Prelim 1996	Change from 1989 to 1996
Computer												œ	Budget 1997
annual budget (kina millions)										0.55	1.3		2.2
number of staff						_	4	œ	11	11	15	15	
equipment upgrades												×	
terminals						32	32	40	40	40	80	120	
Human Resources Total IRC													1997
Total Staff (see Notes: 1)					220								492
Citizens													479
Non-citizens													10
% Localised													97%
Women													147
% Women													30%

Note: Tax and BCE integrated to form IRC in 1992

Excise	Development Project: Project Implementation Report: November 1987	Annex 3: Logical Framework: Papua New Guinea Bureau of Customs and Exc
	87	d Excise
		cise Institutiona
itution		<u>0</u>

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
GOAL:			
To improve the capability, operations and self-image of the Bureau of Customs and Excise (BCE) and its staff.	 Collection of "correct" revenue Sustained reduction in skills deficit Improve faster service to the public 	 Increased revenue (assuming constant rates, BCE staff etc.) Match between position requirements and occupant skills Records (compared with bench mark) Talk to users of service 	 Management committed to project purposes Recurrent budget / training related costs Staff availability and retention Improved Bureau accommodation
PROJECT PURPOSE / ACTIVITY			
1 Develop core management functions: organisation structure, manpower planning, public relations, external linkages, legislative framework	 Overall staff/revenue ratio Staff retention rate Public perception of Bureau 	BCE records	 The above assumptions constraints apply to all project purposes
 1.1 Design and implement revised organisation structure taking account staff attitudes 	 Organisation structure which is in line with actual arrangements, and has staff support 	 Observation and interviews 	 Commenced or partially implemented by BCE prior to Project implementation
1.2 Design and implement personnel information system in consultation the Training Unit	 % positions filled Match between skills of positions occupant and position requirements. 	BCE recordsBCE records and interviews	 Records will be computerised during life of the project
1.3 Develop public relations and public education activities	 Level of awareness of customs activities 	 Number and quality of press releases, handout, etc. Interviews 	 Baseline records to be established
1.4 Provide supervisory and management training	 Number attending management and supervisory training courses Staff attitude to management and supervisors 	 Training records / course reports Attitude surveys (before and after training) 	 Training program to be established Base line information to be obtained

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
1.5 Provide new uniforms	• Uniforms	Observations	 \$ provided by BCE to Project implementation
1.6 Develop overseas professional linkages	 Number of visits Staff awareness of practices in neighboring countries 	Records Interviews	
1.7 Review legislation	 Absence of legislative anomalies 	 Number amendments etc. 	 Commenced by BCE special projects officer prior to project implementation
2 Review and develop invoice room operations	 Improve turnover time 	 Records (compared with bench mark) 	 Base line records to be established
2.1 Simplify and develop invoice room procedures	• Staff / output ratio	 Audit / recheck records Number of errors Amount \$ of errors Type of errors 	
2.2 Assist in the development of future invoice room training programs	• To be advised	• Number training programs successful compilations	 Training programs to be established
2.3 Develop tariff and valuation skills	 Numbers attending courses Staff evaluations 	 Training records, course reports Recheck system Interviews Observations 	
3 Develop commercial and other investigation activities	 Number of investigation / year by type Staff / revenue ratio Successful prosecutions 	• Records	

 Base line records to be established 	 Records Interview / surveys 	 Supervisor assessment of performance Staff evaluation of training 	5.2 Conduct on-the-job training
 Training programs to be established 	 Training records, course reports Interview / survey 	 Numbers attending courses in tariff valuation cargo control Staff evaluation 	5.1 Develop and conduct skills training programs in consultation with the Training Unit
	 Records 	 All cargo imported is accounted for Correct amount of revenue has been collected 	5 Develop cargo control activities procedures
 Base line records to be established 	 Records Interview / surveys Observation 	 Supervisor assessment of performance 	4.2 Conduct on-the-job training (including procedures simplification)
 Training programs to be established 	 Training records, course reports Interview / survey Recheck system Observation 	 Numbers attending courses in warehouse and excise Staff evaluation of training 	4.1 Develop and conduct excise and warehousing skills training programs in consultation with the Training Unit
	 Records Goods entered and accounted for 	 All warehoused goods are accounted for Correct amount of revenue has been collected 	4 Develop excise and warehousing activities and procedures
	 Interview / surveys Records Staff reports 	 Staff evaluation of training Supervisor assessment of performance 	3.2 Conduct on-the-job training
 Training programs to be established Base line records to be established 	 Training records, course reports Interview / survey Observations 	 Numbers attending courses in investigation and advanced investigations Staff evaluation 	3.1 Develop and conduct investigative skills training program in consultation with Training Unit
Assumptions and Constraints	Means of Verification	Objectively Verifiable Indicators	Narrative Summary

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
5.3 Simplify and develop procedures		 Records Observations	
6 Review and develop audit system and procedures			
6.1 Develop suitable recheck procedures	 Error rate 	 Records 	 Base line records to be established
6.2 Simplify and develop audit systems and procedures	 To be provided by Project Team when role has been determined 	 Records Observation	
7 Develop data bases for management, information and planning (maintain liaison with taxation project regarding computer use)	 Accuracy and relevance of information available to management 	 Inspection Interview / survey of users Observation 	
7.1 Revenue Information		• Records	 Base line records to be established
7.2 Management statistics		• Records	
7.3 Law enforcement		• Records	
7.4 Document facility (word processing)	 Usage of word processing facility 	 Observation 	
8 Develop training unit	 Fully staffed training unit with planned training programs and profiles of training needs 	 Inspection Programs PI.S. 	
8.1 Develop and conduct methods of instruction course for trainees	 Numbers attending courses 	 Training records/ course reports 	
8.2 Conduct follow-up coaching	 Number of staff coached 	 Records/staff records 	
8.3 Develop training manuals and materials	 Number and quality of material produced 	 Inspection / observation 	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
8.4 Training / personnel attitudes survey	 Survey results and use to which they are put 	Records Interviews	 Baseline records to be established
8.5 Develop, conduct and administer basic training in consultation with line branches	 Number of staff attending courses 	 Records/ course reports Observation 	 Training programs to be established
8.6 Develop, conduct and administer basic skill training (industry familiarization etc.) in consultation with line branches	 Number of staff attending courses 	 Records/ course reports Observation 	 Training programs to be established
9 Project management	 Quality and timeliness of reporting to AIDAB Substantive project achievement Financial control Quality of inter-office communications 	 Records Overall assessment Base line records Quarterly reports Assessment Observation 	 Adequate resources Base line records to be established
9.1 Management support by Office of the Project Director			
9.2 Management support by Team Leader		Observation Reports by BCE	
9.3 Management support by Training Adviser		Observation Reports by BCE	

General Induction	Technical	Management supervision	Staff	Training	Audits	% successful	Number successful	Number of prosecutions	Investigation/staff	Investigation staff	Number of investigations	Passenger/Staff	Staff (Passenger)	Passengers - 000's	Lae	POM	Invoice turnaround time (days)	Annual Expenditure K mil.	Total Staff	Total	Export duties	Import duties	Taxes on International trade	Excise Duties	Millions of Kina	liem
																				179	13	104	117	62		1985
2		2			4	%69	18	26	2.6	10	26							2.4	245	202	14	123	137	65		1986
13		_	2		Сл	%69	27	39	4.9	8	39				7.5	4.5		2.1	229	229	17	144	161	89		1987
12	30	22	2		12	79%	23	29	6.5	6	39				2	2		2.6	218	240	16	157	173	67		1988
ω ω	8	78	4		14	%0%	38	42	5.3	8	42				2	2		3.9	224	299	12	204	216	83		9861
25	12	55	4		22				6.1	œ	49	3627	41	148.7	2	2		2.9	227	284	13	181	194	8		0661
13	24	31	4		11	97%	28	29	6.7	7	47	3473	45	156.3		_		သ .သ	246	287	18	190	208	79		1661
																				317	26	198	224	9 3		1992
																				365	74	198	272	93		1993
																				488	137	247	384	104		1994
																				530	133	294	427	103		1995
																				620	165	339	504	116		Prelim 1996
																				271%	%176	235%	313%	171%		% Change from 1987 to 1996

Annex 4: Chronological Quantitative Data: BCE

1 5			
GOAL:			
To improve the educational standards of the Community Teachers College's (CTC's) through the professional development of their teaching staff	 Policies and programs 	 Report of policy reviews and forward budgets 	 That the GOPNG will support the CTC's and community schools
 1.0 Academic course work in Australia Objective: To raise the ability and self-confidence of serving and associate lecturers through a program of course work at an Australian tertiary institution 	 Award of qualifications 	 Reports from the course supervisors 	• That lectures will be placed in the most appropriate courses and that they will be released from duties as required
1.1 Outputs: CTC serving lecturers and associate lecturers with wider educational experiences on which they can draw in their career development and improved ability to teach in English	 Attendance at courses and the award of qualifications 	 Reports on candidates by the Australian institution and the DOE 	• That the DOE will schedule the release of candidates
Activities: 1.1.1 Serving lecturers undertaking courses of study of one year's duration at an Australian institution for the award of B. Ed (UPNG)	 Award of degree 	 Report from the Australian institution and UPNG 	 That students have been properly attached to courses
1.1.2 Associate lecturers undertaking the final year of the B. E (T) at an Australian institution	 Award of degree 	 Report from the Australian institution and UPNG 	 That students have been properly attached to courses

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions and Constraints
2.0 Campus or regional training in PNG Objective: To prepare CTC serving and associate lecturers in English language prior to their undertaking course work in Australia and to support their development of practical experience	 Performance at courses 	 Reports on staff development by DOE and by Australian course directors 	• That DOE and the CTC's will be able to provide the facilities necessary for the courses and that outside expertise will be available
2.1 Outputs: Lecturers with improved ability and confidence in teaching in the English language and in practical course writing and development	 Attendance at courses and the award of qualifications 	 Reports from Principals and Inspectors 	• That Principals will provide time for lecturers to attend courses
Activities: 2.1.1 A program of distance education mode of support for English language training	 Implementation of the course and award of certificate of attainment 	 Reports on the results obtained 	That Principals will provide time for lecturers to attend courses
2.1.2 Conduct of short courses in PNG at the CTC and sub-regional level	 Implementation of the course and award of certificate of attainment 	 Reports on the results obtained 	• That Principals will provide time for lecturers to attend courses

Item	989	1990	1991	1992	1993	1994	1995	9661	1997	Totals
CTC Total staff									164	
Total teaching		130	125	128	135	130	132	142	143	
citizen		90	91	90	66	102	106	127	118	
female citizen		15	16	14	14	11	16	27	18	
% female		17%	18%	16%	14%	11%	15%	21%	1 <i>5</i> %	
non-citizen		40	34	38	36	28	26	15	25	
Student : Teacher		12.2	10.7	9.1	12.9	13.4	13.0	12.4	12.5	
Trained at QUT		7	13	14	14	15	13			76
Female QUT			2	0	ω	4	ω			13
% Female		14%	15%	0%	21%	27%	23%			17%
No longer lecturing		2	5	8	7	2	5			29
% still lecturing		71%	62%	43%	50%	87%	62%			62%
Left Public Education			ω	ω	ω		Сл			16
% in Public Education		%98	77%	79%	79%	93%	62%			79%
Total CTC students		1591	1342	1163	1735	1738	1716	1766	1784	
female		628	573	258	830	762	803	887	895	
% female		39%	43%	22%	48%	44%	47%	50%	50%	
Total CTC Graduates		777	765	767	520	566	543	512		
Female		302	302	302	253	265	231	224		
% Female		39%	39%	39%	49%	47%	43%	44%		
repeats dropouts				10%	11%	8%	8%	11%		
in-service courses										
in-service courses										

Annex 6: Chronological Quantitative Data: CTC

Annex 7: List of Co	ontacts	
Name	Department	Title
AusAID		
John Bailey	Evaluations Section	Director
Carolyn Brennan	Evaluations Section	Task Manager
Julia Newton-Howse	Education, Law And Justice	Director
Sam Zappia	Education, Law And Justice	Manager
Phillip Phard	International Projects	Manager
John Caldwell	PNG Programs	
Kristen Pratt	PNG Programs	
Gaynor Shaw	PNG Programs	
Rob Stewart	PNG Programs	
Val Hull	PNG Programs	Manager
Mark Brownbill	PNG Programs	Project Officer
Peter Batten	PSSI (Contracts)	
Jeremy Fischer	PSSI (Contracts)	
AusAID - PNG		
Annmaree O'Keefe		Minister-Counsellor
Robin Scott-Charlton		Counsellor
John Westcott	Law & Justice	First Secretary
	Renewable Resouces	
Allison Sudradjat	Health and Humanitarian	First Secretary
Paul O'Neill	Transport	First Secretary
Penny Bond	Law & Justice	Second Secretary
Angus Barnes	Renewable Resouces	Second Secretary
Deborah Fulton	Education & Traning	Second Secretary
Allison Chartres	Bouganville	Second Secretary
Josephine Hutton	Transport	Second Secretary
Gary Abbott	Transport	Second Secretary
Mose Koliwan	Law & Justice	Development Officer
Internal Revenue Com	mission	
James Loko		Commissioner IRC
Willie Banjoy		Executive Officer
Bill N Nouairi	Policy and Legal Affairs	Assistant Commissioner
Penny Cole	Human Resources	Director
Winnie Raga	Human Resources	Manager

Annex 7: List of Contacts

Name	Department	Title
Seri Tau-Vali	Human Resources	Manager Staff Development And Training
Ian Hudson	Information Technology	Director
John Mowatt	Information Technology	Senior Systems Analyst
Joses Mailau	Information Technology	Programming Manager
Customs and Excise		
David Sode		Commissioner Of Customs
Tapas Sokol		Asst Comm Revenue Management
Michael McRae		Asst Commissioner: Enforcement
Frank Babaga		Director Investigations
Frank Barara		Director Intelligence
Lydia Wartovo		Principal Advising Officer Valuation
Joe Krammer		Asst Comm Regional Operations
Laufa G Miro		Prin Advising Off. Inland Revenue
Bernard Tulemanil		Principal Advising Officer Tariffs
Henry L Buku		Director Inland Revenue
Paul Iramu		Regional Director Southern
Taxation Office		
Mark Opur	Taxation	Commissioner Of Taxation
Peter Kochannek	Taxation	Asst Commissioner Revenue Collection
Ron McKie	Taxation	Asst Commissioner:Revenue Assessment
Grace Tarova	Taxation	Director Assessment
Brian Wilson	Taxation	Director Audit
Benjamin Harry	Taxation	Senior Auditor - Training
Customs Stakeholders		
Joe P. I. Evi	Air Nuigini	Cargo Systems & Development Manager
Rakum Peni	Air Nuigini	Cargo Services Manager

Name Phillip Kansol Andrew Filfi

David Sutton David F Hartshorn Neil B Feakes James Iorive Wayne Woolly

Guma Opi Doug Maskelyne

Karl Davis

Nathan Valoiloi

Geoffrey L Cook Grahame Lawson Paiga Augerea J. Alan Collinge Robert B Leo

Arthur Kang Taxation Stakeholders Rex Paki

Graeme Sheard

David MurrayIColin MilliganIMick NadesNTensing TauwaoleNNational Planning Office

Kelly Matoli

Department Air Nuigini Air Nuigini

DHL Worldwide Express DHL Worldwide Express Brian Bell & Company Brian Bell & Company Steamships Pty Ltd

Steamships Pty Ltd TNT Air Cargo, PNG Air Freight Pty Ltd. TNT Air Cargo, PNG Air Freight Pty Ltd. TNT Air Cargo, PNG Air Freight Pty Ltd. Boroko Motors Ltd Boroko Motors Ltd Boroko Motors Ltd Shell PNG Pty Ltd

Shell PNG Pty Ltd

Ram Business Consultants PNG Institute of Accountants Inc. KPMG Chartered Accountants Deloitte Touche Tohmatsu Deloitte Touche Tohmatsu Nades and Associates Nades and Associates Dffice

Foreign Aid Management Division **Title** Duty Manager International Warehouse Supervisor General Manager, PNG

Imports Manager Director Customs Manager Manager Merchandise Division Customs Agent National Operations Manager Branch Manager

Customs Manager

Divisional Manager - Nissan Divisional Manager Customs Manager Operations Manager Supply and Shipping Manager Engineering Manager

Partner President

Partner

Managing Partner Director Taxation Services Managing Partner Partner

Manager

Name
Annah Mase-Tua
Ora Ila

Anna Marikawa

Tutai Gire

Peter M Baki

Department

PNG Programs Resource Programs and Monitoring Resource Programs And Monitoring and Monitoring

National Department of Education

I CICI IVI DANI	
Luke Taita	Planning & Administration
William Penias	Professional
Jerry Kuhena	Professional
Patrick Modakewau	General Education Services
Kingston Alu	Staff Devlp & Training
Francis Puaria	Staff Devlp & Training
Obe Kints	Staff Devlp & Training
Michael Smith	Staff Devlp & Training
Chris Prince	Staff Devlp & Training

New Teachers Stakeholders

Title

Program Officer AusAID Assistant Director

Senior Monitoring and Evaluation Officer Senior Monitoring and Evaluation Officer

Secretary for Education Deputy Secretary Deputy Secretary A/Deputy Secretary First Asst Secretary CTC Inspector Principal Training Officer Staff Develpmt Officer Superint. Curriculum

Brother Boney		Teacher
Joseph Dongari		Teacher
Dorcas Eirisa		Teacher
Brother Erico		Teacher
Lilly Garsna		Teacher
Vetarinama Gure		Teacher
Lucy Kalan		Teacher
Gonna Kila		Teacher
Raura Korema		Teacher
Vallina Koupa		Teacher
Elsie Peril		Teacher
Yaki Pova		Teacher
Noelyre Rasin		Teacher
Lyn Selun		Teacher
Heads of Primary Scho	ols Stakeholders	
Agara Vale	Coronation Primary School	Headmistress

Name	Department	Title
Fred E Eovo	Hohola Demonstration School	Headmaster
Annemarie Kona	Sacred Heart Primary School	Headmistress
Mary Bita	St Peter Schnel Primary School	Headmistress
Jimmy Avaso	Waigani Primary School	Headmaster
Mary Abdul-Rahman	Wardstrip Demonstration School	Headmistress
NCD Primary School	Inspectors Stakeholders	
Stephen Lapan		Assistant Secretary
Venina Kada		Deputy Senior Inspector
Mary Bossin		Inspector
Henry Kakale		Inspector
Mary Paui		Inspector
Kerimo Raei		Inspector
Willie Selim		Senior Inspector
POM In-Service Colleg	ge Stakeholders	
Rochas Birao		Principal
Tavo Auco		Lecturer
Margret Arua		Lecturer
Jenny Kome		Lecturer
Price Waterhouse Urw	ick Taxation Contractor	
Ted Van Real	International	Partner
Peter Chapfield	International	Project Manager ADP: PNGTO
Queensland University	Of Technology CTC Contrac	ctor
Clarrie Burke	Faculty Of Education	Associate Professor
Keith Lucas	Faculty Of Education	Associate Professor
Donald Steward	Faculty Of Education	Associate Professor
Australian Customs Se	rvice BCE Contractor	
John Marks	International	Asst Director
Alan Murray	International	Project Director - BCE
Veronica Fairbain	International	Project Officer - BCE
Ray Cork	International	Training Advisor - BCE

Annex 8: Scope of Services

1 Background

1.1 AusAID has requested that an evaluations be undertaken of a cluster of institution strengthening projects. This cluster evaluation will represent the first evaluation AusAID has undertaken in PNG and the outcomes will feed into program development and the study of program effectiveness as well as the Treaty Review.

- Two institution strengthening projects will be evaluated:
- Customs and Excise Institutional Development Project; and
- Taxation Office Institutional Development Project

1.2 In addition, a third project, the Community Teachers' College Lecturers Professional Development Project will be evaluated to assist PNG Branch with future project development in this subsector.

2 Scope

2.1 Work completed in Australia by the evaluation team, prior to departure for PNG, together with AusAID's Evaluations Task Manager will include:

- A review of documents to determine for each project -
- project objectives and approach
- changes during implementation
- availability and quality of resources
- project management
- development context

2.2 Identification and compilation of key questions and project impacts to be examined in the field.

2.3 Preparation of a draft itinerary for fieldwork for forwarding by the Task Manager to AusAID, Port Moresby.

2.4 Provision to AusAID of a draft report containing introductory components of the report and the collection of all information on final project costs.

2.5 Work completed in PNG by the Evaluation Team, in consultation with the AusAID Task Manager, the Government of PNG and AusAID Port Moresby will include:

- a) coordination of a schedule of appointments which will include relevant GoPNG counterpart and implementing agencies;
- b) assessment of the impact and sustainability of the projects within the context of GoPNG's current administrative arrangements and against the aims and objectives of the projects outlined in the project documentation; and
- c) complete an assessment of any social and environmental impacts of the projects

2.6 The evaluation team is responsible for -

the preparation of a comprehensive overview of lessons to be learned from the evaluation. The lessons learned will be in a form which can be applied to new activities in similar sectors and contexts.

2.7 Ensuring that all phases of reporting are on time and take account of changes requested by AusAID:

- a) carrying out other tasks necessary for the successful completion of the evaluation as may be requested by the Task Manager;
- b) complete a rapid field evaluation of the projects;
- c) ensuring that an Aide Memoire or draft report is completed for negotiation and signing with the GoPNG prior to return to Australia; and
- d) briefing AusAID on return to Australia.

3 Workplan

3.1 The workplan shall consist of 3 phases:

- a) a 15 day desk study in Canberra prior to departure for Port Moresby;
- b) days of fieldwork in PNG; and
- c) briefing and 5 days of work on the final report for AusAID on return to Australia.

4 Reporting

4.1 The format at Attachment 4, Chapter 6 of the Country Programs Operations Guide, Volume 2 is to be used as a guide to the format for the report. A short final report of no more than 40 pages of text and essential appendices will be provided to AusAID within 10 working days of receipt of AusAID's comments on the draft report. The draft report will be produced in 2 stages:

- a) the basic format and introductory text to be completed prior to departure for Port Moresby;
- b) the draft report for submission to AusAID to be completed prior to return to Australia.

4.2 In addition to hard copy the evaluation team must also submit a complete copy of each report on diskette in software compatible with AusAID systems (IBM format, MS Office, Word 6 and Excel 5.0) for:

- a) the reports listed in this Schedule 1; and
- b) all other reports required under the project and submitted to AusAID.

4.3 Such matters as are incidental or ancillary to the consultancy services and which are mutually agreed between the parties.

Annex 9: Institutional Strengthening Projects

As the process of institutional strengthening (IS) lacks a rigorous definition the evaluation team has used a working definition as follows:

The process of institutional strengthening means to increase the capacity of institutions to perform their functions¹

To evaluate institutional strengthening projects it is necessary to identify how the project increased the capacity of the institution to perform their functions. In other words what interventions have increased the capacity (output) and how is that related to performance of their functions (outcome).

The report footnoted above also identifies several characteristics of successful IS projects which include:

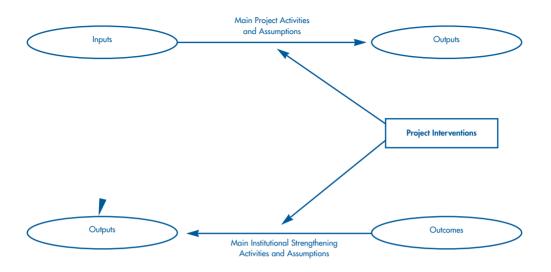
- Principal stakeholders and target institution understanding, commitment and ownership of the project;
- Management of performance in the target institution (clear objectives, duties, incentives to perform, etc.);
- Simplified design to fit country with realistic time-frames and objectives;
- Close monitoring and built in flexibility to facilitate adjustment of projects as they proceed;
- Institutional and stakeholder capacity,
- An understanding and consideration of institutional and country specific context;
- The involvement of external institutions (stakeholders) which can contribute in a complementary way;
- The use of existing institutions to implement and avoiding the creation of Project Management Units; and
- Careful selection criteria, choice mechanisms and Terms of References of technical assistance personnel.

¹ Based on: Evaluation of Programs Promoting Participatory Development and Good Governance: Synthesis Report; DAC Expert Group On Aid Evaluation; Organisation for Economic Co-operation and Development; 1997; pg. 47.

Institutional strengthening characteristics and their presence pre project completion and post project completion

Each project has two columns - up to the completion of the project and after the completion of the project and includes all components of the project. The characteristic described below are for discussion.

Characteristic	Taxation Project Co		Customs ar Project Co		Con Teachers (Project Cor	Colleges
	Uр То	After	Uр То	After	Uр То	After
Principal stakeholders and target institution understanding, commitment and ownership of the project						
Management of performance in the target institution						
Simplified design to fit country with realistic time-frames and objectives						
Close monitoring and built in flexibility to facilitate adjustment of projects as they proceed						
Institutional and stakeholder capacity						
An understanding and consideration of institutional and country specific context						
The involvement of external institutions (stakeholders) which (who) can contribute in a complementary way						
The use of existing institutions to implement and avoiding the creation of Project Management Units						
Careful selection criteria, choice mechanisms and Terms of References of technical assistance personnel						



Logical Framework and Institutional Strengthening

Characteristics of successful IS projects:

- Recipient capacity and commitment and ownership.
- Management of performance (clear objectives, incentives, MIS, etc.).
- Simple design, close monitoring and flexibility.
- Understanding country and organisational specific contexts.
- Involve external institutions (stakeholders) which can contribute in a complementary way.
- Use exsisting institutions to implement avoid Project Management Units
- Careful selection of contractor and advisers.

(Source: Evaluation of Programs Promoting Participatory Development and Good Governance; DAC Expert Group on Aid Evaluation; OECD; 1997; pg. 11)

