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The development of provincial health planning in Papua New Guinea: A case study

Karel, Stephen Gerard, Dr.P.H.
University of Hawaii, 1993

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THE DEVELOPMENT OF PROVINCIAL HEALTH PLANNING
IN PAPUA NEW GUINEA: A CASE STUDY

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI'I IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PUBLIC HEALTH
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ABSTRACT

This dissertation is about the provincial health planning process utilized in Papua New Guinea. This process was based on the developmental or learning process approach and its aims were to support the development of provincial health plans, build skills in health planning and to enhance problem-solving capacities of program managers. This study was an attempt to evaluate or assess how well this process achieved these aims.

This study touched on numerous concepts and issues in international health and development. It took place in an environment of decentralized health services and represented a deliberate attempt to transfer an adapted version of Western health planning technology through a participatory, flexible, and process-focused approach. The process also intended to foster organizational development and growth.

The case study research methodology was employed to assess or evaluate how well this process met its objectives and what factors were associated with its relative success. The study relied on qualitative data obtained from 52 in-depth interviews conducted in four case provinces. A review of provincial health documents was completed to supplement the interview findings.

Seven dimensions of the process were examined in each of the four study provinces; participation/ownership, political support, health planning process factors, most important reason, evaluation of the process, health planning skills, and organizational development.
All four of the case provinces successfully completed their provincial health plans. All four also reported learning health planning skills. Organizational development, however, was reported to have occurred to a lesser extent.

The factors associated with successful completion of the provincial health plans included broad participation, ownership of the plans, political support, the training modules, technical support, leadership, organizational capacities, a strong desire to have a plan, commitment of staff, and cooperation and teamwork of provincial program managers.

This study has shown that the developmental approach utilized in the provincial health planning process in Papua New Guinea can have positive results. Certain factors were more important than others for the achievements made. Overall, the process was successful in achieving its aims, but more standardization of implementation is needed to ensure more consistently positive results across all provinces.
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CHAPTER 1
INTRODUCTION

Purpose

This dissertation is about the development of provincial health planning in Papua New Guinea. The purpose of the study was to examine the provincial health planning process utilized in Papua New Guinea and to assess the relative success experienced in achieving its objectives. More specifically, it examined the process as well as the factors involved in developing five-year provincial health plans.

This study addressed a major issue in international health and development: decentralization. The decentralization of health services to rural or peripheral areas has been advocated as a positive step in building local participation and ownership. Decentralization has often been initiated without adequate consideration being given to the implications of such a decision. A major consideration is that decentralization requires concomitant skill-building training programs. Another issue is whether or not the community is ready to accept a decentralized service delivery system.

The decentralization of health services in Papua New Guinea has meant that the provincial level of the health system has had to face increased responsibilities for the planning and managing of rural health services. The rural health managers who had to face this level of increased responsibilities were not simultaneously provided with a training support package. Only later was this started.
This study presented an important and unique opportunity to examine the decentralization of health planning functions in a country which did not initially provide adequate training for the rural health managers.

The research methodology of the study is the case study method. It is primarily descriptive, exploratory, and cross-sectional in nature. This methodology is particularly relevant for practice-oriented fields such as planning, public policy, management sciences, public health, and education. It is well-suited for studies that try to determine the effectiveness of programs that occur in multiple sites and under differing conditions over a period of time.

The scope of this study included the examination of the provincial health planning process in 16 of the 19 different provinces over a period of two years.

Background

Socio-Economic Structure of Papua New Guinea

Papua New Guinea is located just north of eastern Australia. Its land mass of 462,840 square kilometers consists of the eastern half of New Guinea, several large and 600 small islands of the Bismarck and Louisiade Archipelagoes, and the North Solomon Islands (see Figure 1).

The mainland of New Guinea consists of highlands, with mountains up to 4,500 meters and coastal plains with large river systems. The islands are mountainous with numerous volcanoes in various states of activity. The country has
only 18,520 kilometers of roads, of which 1,037 are sealed (Campos-Outcalt, 1989). The capital of Port Moresby has no road access to most of the country. Plane and ship transportation are heavily depended upon.

Papua New Guinea is a very young country in the sense that it became independent from Australia in 1975 and first recorded contact between its indigenous peoples and outsiders was made more recently than nearly any other country in the world. Some of these first contacts were made as late as the 1930s and 1940s.

The political institutions of Papua New Guinea take the form of the Westminster parliamentary system. The national parliament at Port Moresby has 109 members and the Queen of England, represented by the Governor-General, is Head of State. Papua New Guinea maintains close ties to Australia and the British Commonwealth.

The people of Papua New Guinea are predominately Melanesian. Strong regional and tribal identities and loyalties exist and over 700 languages are spoken. There is no official language although English and Melanesian Pidgin are used widely in government and business.

Eighty-eight percent of the population live in villages of less than 500 people. There are only eight urban centers of 10,000 or more, and only Port Moresby has a population of more than 100,000. The population is estimated at approximately 3.7 million with 43 percent being age 15 or under and 16 percent age 5 or under. The birth rate is 34.2 per thousand, and the growth rate is 2.2 percent. By the year 2000, the population will number between 4.5 and 4.9 million (Campos-Outcalt, 1989).
Land tenure in Papua New Guinea is vested in the clan, and all members of the clan have rights to the land for farming, hunting or building their houses. Consequently, there is no landless peasantry. Traditional social organization is simple and democratic. Leadership is acquired through ability, and a system of hereditary chiefs is found in only a handful of these cultures (Axline, 1991).

The economy of Papua New Guinea is a government-regulated free market. Most of the population depend upon subsistence agriculture. Only ten percent of working-age adults have formal wage employment, and of these, one quarter are public servants. Government income derives mainly from direct taxation (28%), indirect taxation (23%), and Australian aid (34%). Australian aid accounts for 22 percent of all government revenues, indicating a pervasive, continuing dependence on the former colonial power.

The traditional subsistence economy was based on shifting slash and burn agriculture, and on hunting or fishing. Root crops, such as sweet potatoes, taros and yams, were the main staples, although coastal peoples tended to rely more on bananas and sago. There was a certain amount of both local and long-range trade, but mostly in small quantities of prized goods. In the highlands, particularly, pigs are highly valued and have been raised for consumption at important traditional feasts or "sing-sings" and for the ritual exchanges of wealth between clans (Axline, 1991).

Modern economic development has been based on tropical tree crops and mining. Only one percent of the land is of high agricultural potential with another 28 percent being of moderate potential. Copra has been cultivated in plantations since
the beginning of the European occupation. Coffee and cocoa plantations were developed after World War II. However, the main feature of the rural economy during the 1960s and 1970s was the development of smallholder plantations, so that now 75 percent of coffee production and more than 40 percent of copra and cocoa come from small holdings. This widespread cultivation of cash crops has resulted in the construction of a very good road network in the highlands, with other roads on a more limited scale in the coastal areas. Larger plantations owned by communities or commercial bodies still exist, and these continue to be worked by migrant laborers, recruited primarily from other parts of the country (Axline, 1991). Unfortunately, these tree crops are extremely vulnerable to price fluctuations and recent times have witnessed a severe drop in prices for these commodities.

Since the mid-1970s, most of Papua New Guinea's foreign exchange earnings have come from gold and copper mining. Alluvial gold has been mined from different parts of the country since the beginning of the century, but the main source of income, until 1989, was the gold and copper mined at Panguna, North Solomons Province. The mine was forced to close in 1989 due to problems with landowners. Another large gold and copper mine at Ok Tedi and several other gold mines are in the process of development. Significant findings of oil and natural gas have also been made. These developments have the potential to soon make Papua New Guinea a wealthy country (Axline, 1991).

The educational system has greatly expanded since World War II. Adult literacy is estimated at 33 percent, and more than 60 percent of eligible children are
enrolled in primary schools. However, less than 40 percent complete primary school and only 16 percent have the opportunity of going to secondary school after an examination-based selection process (Axline, 1991). Papua New Guinea has a wide range of tertiary training institutions, and has largely succeeded in producing its own professional workforce with the exception of the most highly technical specialists.

Decentralization of Government Functions

Colonial and immediate post-colonial administrative agencies were highly centralized. Strong regional pressure for decentralization of government administration and decision-making appeared even prior to independence. At independence in 1975, Papua New Guinea adopted a series of policies which, among other things, aimed to overcome two of the legacies of the colonial experience: the high degree of centralization of political and administrative power, and the great geographical inequality of wealth and distribution of government services within the country. These policies were embodied in the creation of a national planning system, with mechanisms for redressing spatial inequalities, and in the creation of a centralized system to provide for wider participation in the political process (Axline, 1991). This resulted in a series of legislative acts culminating in the Organic Law on Provincial Government, passed in 1977, which devolved certain national powers to provincial governments.

There are now 19 provinces ranging in population from 30,000 to 370,000, each with elected legislative and public service administrative branches of
government. Many provinces are further subdivided into four or five districts for administrative purposes. Elective government below the provincial level consists of local government councils, which have limited powers over municipal activities.

Papua New Guinea embarked on a process of decentralization at a time when current development thinking emphasized self-reliance, a more equitable distribution of wealth and greater political participation. It is not surprising then, that these aims are reflected in the existing decentralized system of government in Papua New Guinea and, being as ambitious as they were, that they would involve some conflicts (Ballard, 1981; Conyers, 1976; and Tordoff, 1987).

The contradiction in these policies lay in the competition for control over the allocation of scarce resources necessary to effect any policy of spatial redistribution. If the national government retained this control, it could reallocate resources from the richer to the poorer areas. If resource allocation was transferred to provincial control as part of a process of decentralization, the means of redistribution would be denied to the central government (Axline, 1991).

The policy of decentralization that Papua New Guinea adopted was ambitious and led some analysts to argue that the government had denied itself the means to effect any redistribution, particularly as regard to the delivery of government services (Axline, 1991).
Decentralization of Health Services

The decentralization of health services to the provinces was initially met with reluctance by the National Department of Health. The complete process took from 1977 to 1982 and had to overcome numerous obstacles.

A major problem that arose early was the opposition by senior national level staff to devolving their administrative authority to the provinces. Some of the senior program heads at the national level also found it very difficult to switch from being in charge to serving as technical advisers to provincial programs. They felt a loss of control over resources. (Reilly, 1990).

The provinces took over responsibility from the National Department of Health for selecting their health administrators and managers. This meant that the quality of leadership at the provincial level varied considerably. Some provinces selected very capable leaders. Other provinces selected less capable leaders, perhaps due to political or clan affiliation.

Following decentralization, staff at the provincial level initially tended to become confused regarding their responsibilities and loyalties. Reilly (1991) felt that there had been problems with the transfer of administrative and political powers related to health which resulted in ambiguity, ill-defined authority and responsibility relationships, and in some instances, duplication of positions and services. He further pointed out that the provision of assistance from National Department of Health personnel has virtually broken down with very little meaningful advice being given to
the province's health personnel. Other problem areas were political interference, the
attitude of national level staff, and the shortage of skilled labor.

Most sections of the National Department of Health did not take up the new
responsibility of visiting provinces and providing technical advice (Reilly, 1990).
This lack of guidance, serious in provinces with inexperienced provincial health
officers, could have been due to such factors as lack of travel funds, uncertainty
about roles, and perhaps most important, a lack of confidence by headquarters staff in
their own technical skills.

Mechanisms for involving the community in the running of the provincial
health services were left to the province itself to determine. The National
Department of Health recommended that provincial health boards and lower-level
health committees should be established to support the services. Some provinces
followed these recommendations; management committees were set up at various
levels in health institutions and the community provided some financial input in
support of certain services. When problems arose about accountability for these
funds, the provinces were recommended to pass a Health Service Administration Act
that legalized community inputs and responsibilities (Reilly, 1990).

Responsibility for implementing the decentralization policy rested with the
national government through the Ministry and the Provincial Department of
Decentralization (later renamed Provincial Affairs). However, much of the actual
implementation was done by the "parent" departments, with technical and program
advisers from the National Department of Health visiting the provincial departments.
Regular conferences were held between the assistant secretaries for health in the provinces and their counterparts in the National Department of Health (Reilly, 1990).

The National Department of Health underwent a restructuring process to enable it to better deal with its enhanced role as a technical advisory body to the provinces. The new structure that was approved included six technical divisions placed directly under the National Secretary for Health. Four regional offices were created, each to cover approximately four provinces. These were staffed by re-located headquarters staff ostensibly to provide more accessible technical support to their respective provinces (Reilly, 1990).

The results of decentralization have varied, largely depending on leadership. Where provincial leadership has been strong and capable, programs have improved; where it was not good, some health services have actually deteriorated (Thomason, Newbrander and Kolehmainen-Aitken, 1991). With decentralization, the National Department of Health lost its power to appoint the most suitable staff for provincial health services. Provincial governments now appoint all their own staff. In a few provinces, appointments appear not to have been made on the basis of leadership and administrative ability. Even though the National Department of Health brought this to the attention of the provincial authorities, it could not take any action to rectify these problems (Reilly, 1990).

It took five years, from 1977 to 1982, for the implementation of decentralization of health services to be finally completed. Strong resistance to change was encountered from the senior staff of the National Department of Health.
Bureaucratic problems, particularly in matters of staffing, may have hindered the smooth transfer of powers, and health service standards were adversely affected during the transfer period (Reilly, 1991).

The decentralization process in Papua New Guinea was strongly supported by national political leaders and, thus, its rate of implementation could not be altered to suit administrative requirements. If decentralization had occurred over a longer period of time across the country, perhaps many of the problems encountered with leadership could have been overcome. More time could have been devoted to establishing appropriate administrative systems.

Overlooked in this decentralization process was the consideration that some form of training would be needed to support the provincial administrators with their increased management responsibilities (Reilly, 1991). The practical implications of actually running a system of decentralized provincial governments and what type of skills and training would be needed were not given much thought. Training programs were not developed to support the decentralization process.

**Health Services Structure**

The present structure of the health services in Papua New Guinea is the result of a rational process of development led by the central government since World War II. Non-government health services are limited to a small but growing number of private doctors and dentists working in the larger towns, one hospital and a few clinics or health centers run by the larger mining and commercial companies, and...
some quasi-governmental corporations. Health services provided by churches and Christian missions have been incorporated into the government system and receive subsidies for the work that they do (Aitken, 1991).

Since independence, the National Department of Health has emphasized development of rural health services, placing lower priority on hospital expenditures. Currently, 96 percent of the population live within two hours travel time of some health facility (Aitken, 1991).

Providers of health care include aid post orderlies, hospital orderlies, nurse aids, nursing officers, and health extension officers (similar to a physician assistant). Medical officers generally work in hospitals and serve in consultative and supervisory roles in rural health services. Hospital orderlies are being phased out. Nurse aids and aid post orderlies are used interchangeably in many parts of the country. Their training is similar and will be combined into one curriculum resulting in the union of these two categories of health workers into one called community health worker (Campos-Outcalt, 1989).

Health services are available to the individual from three, sometimes overlapping, systems: the public health care system, the private health care system, and the traditional health care system (Aitken, 1991). This study is limited to the public health system because it is the major provider of health services in Papua New Guinea and the provincial health planning process only involved the public health system.
The public health care system means the services which the government and the churches provide and address the main health problems of the community. It includes promotive, preventive, and curative services.

Public health services are provided by means of a three-tiered referral network which, in part because of Papua New Guinea's overwhelmingly rural nature, has largely avoided the dominance of curative/hospital-based facilities and services. Services are provided at the following three levels:

(a) Primary health services, offered by 2,308 aid posts, 278 health subcenters and 195 health centers, have been designed as the "entry point" to the public health network. Primary health services emphasize preventive treatment, aim to be close to the community and as universally available as possible, and use the most appropriate and least expensive health personnel that can adequately deliver the required services.

(b) Secondary health services, offered at provincial and district hospitals, support the primary health services and involve more sophisticated diagnostic and inpatient treatment.

(c) Tertiary health services, provide more advanced care, on a limited basis, at four designated base hospitals in Goroka, Lae, Mount Hagen and Rabaul as well as at Port Moresby General Hospital.

Prior to independence, the government health services were controlled and centrally administered by the National Department of Public Health in Port Moresby through regional and provincial health officers (then known as district health
officers). As health services developed and their organization in the periphery improved, the central control, so necessary in the past, became an impediment to efficient delivery of services because of increasing difficulty in managing staff all the way down to district level.

Since independence the government has actively pursued a policy of decentralizing responsibility for the delivery of health services to the nineteen provinces. Early in 1977, the National Executive Council approved a submission which provided for the splitting of government’s health service functions between national and provincial governments (Aitken, 1991). Functions were classified into three groups:

(a) **Transferred Functions.** Responsibility for the following National Health Department functions was transferred to the provinces:

- aid posts
- health subcenters
- health centers
- home medicines and self-care
- health committee and health boards
- ambulance services
- supervision of disease control programs

(b) **Nationally Delegated Functions.** Responsibility for other activities was delegated to the provinces to be performed by provincial health staff under the direction of the provincial health officer. The National Health Department retained
ultimate responsibility for these functions, in consultation with the province, and was charged with the establishment of a monitoring system to ensure that they were carried out correctly. Although it was envisaged that complete responsibility for most of these activities would be given to provincial governments at a later date, this has not yet transpired (Aitken, 1991). Nationally delegated functions include:

- the provincial hospital
- malaria control
- extension services (which include control of tuberculosis, leprosy and sexually transmitted diseases, part-time quarantine, dental health services, nutrition work and health inspectors' duties).

(c) National Functions. Responsibilities which remained entirely with the National Department of Health were termed national functions. They were:

- ultimate responsibility for all hospitals, and medical, dental, nursing, preventive health, and disease control services
- monitoring of standards of health service activities across the country and ensuring that satisfactory standards are maintained
- pharmaceutical services
- mental health, radiotherapy, and special medical services
- national health legislation
- planning, policy formulation, and evaluation
- medical training and
• provision of services to the Medical Board, Nursing Council, Fluoridation Committee and other organizations relating to the functions of the National Department of Health.

Although the proponents of decentralization intended the health sector to be one of several designated concurrent functions, in which national and provincial administrations would both have an important voice as a result of continuous consultation and coordination, decentralization in practice has given rise to a situation in which provincial authorities enjoy considerable leeway to disregard the National Department of Health’s stated policies and guidelines (Aitken, 1991).

National Health Planning

Before the First National Health Plan, no objectively based statement existed to define the short or medium term plans for the health services of Papua New Guinea. Planning, when it did take place, tended to concentrate on "nuts and bolts," such as construction, planning for annual budgets or training courses (Bell, 1973). During the early 1970s, Papua New Guinea was experiencing considerable political and social change and the colonial health administrators felt that the National Department of Health should prepare a planning document which would lead the health services into the post-independence period.

The First National Health Plan, prepared by the Department of Public Health immediately prior to independence, covered the period from 1974 to 1978 (Kolehamainen-Aitken and Thomason, 1991). This health planning process
incorporated an extensive data collection exercise and included the compilation of a National Inventory of Health Resources, which was prepared in 1974 (Bell, 1973).

The First National Health Plan was primarily the work of the Health Planning Unit, under the direction of the Health Planning Committee. Assistance in technical areas was provided by committees on health care, health improvement, health resources, health organization, and training.

The Plan was designed to guide the transition from centralized control to limited decentralization. Thus, it included proposals which would increase the financial and administrative control of the provinces.

The First National Health Plan, 1974-1978, provided a useful guide to the development of health services over the period leading into independence. However, it was most definitely a centralized and prescriptive plan.

When the period of the First National Health Plan was over, the Department of Health attempted to develop a Second National Health Plan which was prepared in 1981, but never published. At the time, the National Department of Health was involved in an intense internal struggle regarding decentralization. The resources available at the National Department of Health were insufficient to complete the plan in the atmosphere of conflict that prevailed at that time (Kolehmainen-Aitken and Thomason, 1991).

No national health plan was in effect in 1983 when health functions were finally transferred and delegated to the provincial governments. In May 1984, a planning committee was established within the National Department of Health. It was
a broad-based committee responsible for preparing the Second National Health Plan. The Second National Health Plan 1986-1990 was intended to provide policy direction and to show concrete evidence of the Department’s new role in national planning and policy formulation. Draft chapters were discussed with provincial health managers but their involvement was very limited in any real sense (Kolehmainen-Aitken and Thomason, 1991). They had little opportunity for direct input into the planning process.

The Third National Health Plan 1991-1995 was developed in a much more participatory manner. Regional workshops were conducted to gather provincial inputs. Several drafts of the plan were discussed at national conferences to build enthusiasm and commitment to the plan. The actual delivery of health services, however, was still the responsibility of the provinces.

**Provincial Health Planning**

After the preparation of the First National Health Plan, the Department of Health envisaged that provinces would develop their own plans to translate the National Health Plan into provincial action plans. It was proposed that the provincial health plans would be submitted to the provincial government for approval and then sent to the National Department of Health to ensure conformity with the National Health Plan (Kolehmainen-Aitken and Thomason, 1991).

In most cases this did not eventuate. As a result, most provinces entered the new period of autonomy without rational, articulated plans. As provincial health staff
had only been required to prepare annual activity plans in the past, the requisite planning skills were in short supply (Lausie and Thomason, 1991).

A few provinces were able to complete five-year health plans but these documents were usually summaries of health statistics, without analysis, combined with stated desires for new facilities and staff. This was primarily due to lack of skills in health planning at this level of the decentralized health system (Campos-Outcalt and Newbrander, 1991). Many of the provincial divisions of health were critical of the inadequate support received from the Department of Health in their attempts to develop provincial health plans. This was due to weak planning capacities at the national level. Little training in health planning had been done. This situation was further exacerbated by the strained relationships and role confusion already noted between the national and provincial levels of the health system that had occurred with decentralization (Reilly, 1990).

The provincial divisions of health were poorly prepared to assume the increased levels of responsibility which the decentralization process pressed upon them. They had organizational structures and information systems which were legacies from a centralized, vertical system. Personnel were not trained to assume management positions and budgets were unresponsive to program innovations and stretched by a proliferation of management positions. Most provincial health divisions were operating at a level of dealing with daily crisis situations and of struggling to keep programs functioning at all (Campos-Outcalt and Newbrander, 1991).
A New Approach to Provincial Health Planning

At the completion of the National Health Plan 1991-1995, the government decided that a better method of technical support was needed to help the provinces build their own five-year health plans based on the National Health Plan as a model or guideline. The implementation activities were still to be developed by the decentralized provincial divisions of health. The National Department of Health formed a task force in 1991 and charged it with developing a complete package of support to help the provinces develop their own five-year health plans based on the National Health Plan 1991-1995. Members of the task force included staff from the Policy, Planning and Evaluation Unit of the National Health Department, the World Health Organization, the University of Papua New Guinea's Faculty of Medicine, and the USAID Child Survival Support Project.

The task force members were aware that previous attempts which emphasized a prescriptive or directive approach did not work. They therefore decided to base their efforts on a developmental or learning process approach designed not only to help the provinces to make plans but also to build lasting skills in health planning and enhanced problem-solving capabilities. The idea was to create a process which combined inservice training, intermittent on-site technical support, developed a sense of ownership, and would have some carry-over effects to future health planning undertakings. It was hoped that this process would yield better results than previous experiences.
After six months of work, the task force completed the development of the provincial health planning process. The process centered around two workshops spread over three months. The workshops covered the areas of situational analysis, needs assessment, development of goals, objectives and indicators, activity plans, budgeting, prioritizing, and monitoring and evaluation mechanisms. The workshops were initially facilitated by the study investigator, J. Thomason, A. Bass and R. Kitau. After several workshops, five National Health Department staff were trained as facilitators. These staff have subsequently facilitated the rest of the workshops. The inter-workshop period was designed for additional technical support to be provided to the provinces by headquarters staff. A series of five provincial health planning training modules were written by the study investigator, J. Thomason, A. Bass and R. Kitau. Several drafts were widely circulated within the technical sections of the Department of Health and their feedback was incorporated into the final version. The modules were written to be used before, during and after the two workshops.

These modules were part of a larger, comprehensive Management Support Program funded by the World Health Organization. The modules represented a unit in a series of training materials. The planning modules were Unit E as follows:
The provincial health planning process that was developed was based on the developmental or learning process approach as described in Korten's classic paper of 1980. As such, the modules were designed as active learning materials and incorporated the techniques of group discussion, brainstorming, simulations, forecasting, negotiation and arbitration as well as participative small group work. The principles of adult learning were followed in the development of the materials. The modules used only real data and information; were contextually relevant to the job tasks of the provincial staff, helped solve their own problems and provided immediate assessment and feedback on their activities.

The emphasis of the provincial health planning process was on supporting the provincial management teams through facilitation and provision of the training workshops. The provincial managers were assisted to analyze their own problems
and develop relevant solutions by the workshop facilitators. Because of the potentially greater long-term benefits of participating meaningfully in a structured planning process, the emphasis was equally placed on the process as well as on the product. While the intention was that all provinces should complete their plans, this was not the only objective. As Korten (1979) pointed out, the principal benefit of planning is not always the plan itself, but the anticipatory and participatory experience gained from involvement in the planning process.

The process also had a strong focus on the organizational development of the provincial divisions of health. All activities were conducted in problem-solving teams. These teams were constituted so as to maximize interaction and dialogue among health managers who frequently were not accustomed to working closely with each other. It was intended that this process would thus have some sustained effect on enhancing the capacities of the provincial management team to solve problems in the future. The process was intended to create an environment that could embrace error, plan with the people and link knowledge-building with action.

Additionally, it was intended that during the process, the skills of the National Health Department staff would be enhanced as they provided technical support to the provincial staff. The process could help to clarify and strengthen the technical relationship between the national and provincial levels of the Papua New Guinea health system. The entire process has been highly collaborative since it has involved not only the national and provincial health staff but also staff of several donor agencies. This collaboration and relationship-building is ongoing.
The provincial health planning process utilized the following characteristics or principles inherent in the developmental or learning process approach (Korten, 1980):

(a) Ownership. Since the provincial plans were to be developed by the provincial managers themselves through analyzing their own problems and designing solutions, it was effected that they would be committed to plan implementation.

(b) Teamwork. All the workshop activities were undertaken in work teams to build cooperation during the program, which could then be continued afterwards. Facilitators were used to encourage all members of the groups to contribute to all the activities.

(c) Intersectoral Participation. Key officers from other provincial sectors were included in the process. These commonly included representatives of planning, education, primary industry and social services. Church health services and staff from key rural health centers also participated. This was done in an effort to build commitment to sharing resources for plan implementation.

(d) Incremental Learning. The workshops were structured so that the teams could build on skills and achievements learned in the first workshop, between the workshops, in the second workshop, and after the second workshop. The skill-building inherent in the process was progressive with each day and each exercise built on the earlier sessions. This was to allow repetition and consolidation of learning before new materials were introduced.
(e) **Interworkshop Support.** A key feature of the process was that National Health Department staff from different technical programs travelled to the provinces between workshops to assist them in development of detailed activity plans. This was to provide technical guidance and support to the provincial staff.

(f) **Political Support.** The senior political leaders from each province were invited to the opening and closing functions of each workshop. At this time, they were briefed on the current status of plan development and were given the chance to have input into the process.

(g) **Publicity.** The media were contacted in each province before each workshop and press releases were sent out. In several provinces, the local newspaper made a feature presentation on the plan development. Provincial radio stations also broadcast stories on the planning sessions. It was hoped that public statements and press coverage would foster commitment to the process in each province.

(h) **Realism.** Considerable effort was made to maintain a realistic perspective in the plan development. Real data (flawed or otherwise) on health indicators and financial forecasts were always used.

This provincial health planning process has been taking place since mid-1991 and to date 14 of the 19 provinces have taken part in the health planning workshops. All 16 of the eligible provinces completed both workshops by early 1993.

The provincial health planning process has been implemented with considerable enthusiasm, effort and funding. Unfortunately, not much thought has gone into any type of plan to evaluate this process. No plans for assessment were
originally intended but now the government is interested in evaluating the entire endeavor, especially since it has consumed considerable resources. The Secretary for Health, the highest ranking civil service official of the Department of Health, has encouraged this study of the provincial health planning process (Appendix A).

Problem Statement

Many health planning and management activities in developing countries have been project oriented and not development oriented. As such they have focussed on pilot or demonstration studies, usually involving only the health sector, had little political commitment, and relied heavily on expatriate staff for implementation. More recently there has been more attention paid to the developmental approach. This approach concentrates on permanently institutionalizing improvements, being nationwide in scope, involving multiple sectors, transferring technology and training nationals, and developing self-sufficiency by the host country in planning, training, and management (The MEDEX Group, 1983).

Cassels and Janovsky (1991a) believe these two approaches are fundamentally different in orientation. They have described them as Type 1 or blue print/prescriptive and Type 2 or participatory/flexible in orientation. They detailed the two orientations as follows (p. 114):

Type 1. Directive; blue print; ends-rather than means-oriented; product focussed; prescriptive; normative. Problems are identified,
analyzed and solutions developed by persons other than the managers involved in program implementation. The concern is less with the nature of the process and more with arriving at the most efficient solution.

**Type 2.** Participatory; flexible; means-rather than ends-oriented; process-focused; learning model; adaptive; pragmatic; developmental. Practicing managers are assisted by facilitators to analyze their own problems and develop relevant solutions. The concern is as much for the way the intervention is carried out as it is for the product.

The provincial health planning process that was implemented in Papua New Guinea was deliberately developmentally or Type 2 oriented. It was thought that this approach might have better results than previous attempts.

Unfortunately, there have not been many examples of developmentally oriented health planning activities in developing countries. The short-term nature of many donor agencies and projects have not been conducive to fostering a more developmental approach.

Recently, however, there have been some new advances. The World Health Organization has been involved in health planning activities in Laos and Guinea Bissau which have emphasized ownership, teamwork, repetition, incremental
learning, and support between workshops (Cassels and Janovsky, 1991b). These were the same basic principles that the Papua New Guinea task force utilized in preparing their provincial health planning materials.

While there are now some developmentally oriented health planning activities occurring, there is not much information on the evaluation of these efforts. They have been initiated from lessons learned from past experiences and intuitive feelings but there is a paucity of systematic evaluation into whether this approach has actually achieved more lasting effects. It would be worthwhile if some of these efforts could be chronicled as qualitative evidence of the value and merit of this approach.

Health planning and evaluation skills are weak at all levels of the health system in Papua New Guinea. The three national health plans have never been evaluated. The few provinces that developed limited health plans have not conducted any sort of evaluation nor has the National Department of Health provided them with any support in evaluation. The capacity to evaluate is particularly lacking yet evaluation is a component of health planning. What is needed and wanted by the government is an assessment of the provincial health planning process that will help determine whether or not it met its objectives and what were the main factors associated with its success or failure. Such an assessment will not only prove useful and valuable to the government but should also provide new insights into the efficacy of the developmental, Type 2 or learning process approach to health planning.

The significance of the problem lies in the issues of how sustainable this process of provincial health planning has been, what factors have been associated
with its sustainability, and what components or active ingredients of the process might be transferrable to other appropriate situations. The relevance of this study is enhanced by the fact that many countries around the world are either undergoing some form of decentralization of health services or are seriously considering it and the lessons learned from this study may be very valuable and applicable. Important findings about what makes for successful transferability of skills and capacity-building and what is needed or required for effective decentralization of health services are outputs from this case study. An examination of this process in Papua New Guinea provides needed new knowledge that should be of benefit for public health practitioners.

**Research Questions**

The research questions that guided this study were:

1) What factors were associated with the success or failure of the provincial health planning process in assisting the provinces to make five-year health plans?

2) What factors contributed to the success or failure of the provincial health planning process to build health planning skills in the provincial health workers?

3) What factors contributed to the success or failure of the provincial health planning process to enhance the problem-solving capacities (organizational development) of the provincial Divisions of Health?
4) Which factors were unique to transferring this health planning technology in Papua New Guinea and which are most likely to have merit in transferability to other situations and countries?

Limitations

This study was subject to the following limitations:

1) Only four of sixteen provinces were selected as case study sites. While sample size is not inherently a concern of case studies, it is possible that the planning process in some of the other, non-case study provinces occurred in a completely unexpected manner.

2) There were numerous workshop facilitators and they may have had an unique influence on each of the provinces planning experiences.

3) The study is cross-sectional in nature and may not have captured some of the important phenomena that occurred in each province over time.

4) It is possible that some bias could have occurred in the interview process because of the familiarity of the interviewer with the interviewees. However, in the case study methodology, it has been acknowledged that insiders are best able to discern the nuances and meanings of cases much better than outsiders.
CHAPTER 2
REVIEW OF RELEVANT LITERATURE

Introduction

This dissertation touches upon a wide and diverse literature with concepts, theories and models of numerous disciplines being related to certain aspects of the study. The overall context for the study was one of decentralized health services in a developing country. The provincial health planning process occurred in this context and utilized a particular approach to development management. The planning process also represented an attempt at transferring western management and planning technology. It was intended that this process would also have an organizational development impact upon the provincial divisions of health. The study, while essentially exploratory in nature, did have an evaluative tone as it was meant to assess the relative success of the entire process.

The major concepts, models and issues of decentralization, development management, technology transfer, western management and planning, organizational development, evaluation, qualitative methods, and assessment of training programs are all related to certain aspects of this dissertation. In this chapter, they are reviewed and discussed as relevant.

Decentralization

The decades of the 1970s and 1980s saw a resurgence of interest in decentralization among development agencies of many developing countries. The World Bank, the United Nations Development Program (UNDP), the United States
Agency for International Development (USAID), and the World Health Organization (WHO) are among the agencies promoting decentralization of government services. As a result of external and internal influences, a number of countries in Africa, Asia and the Pacific introduced some degree of decentralization of government functions during the 1970s and early 1980s (Mills, 1990). Such decentralization has frequently included significant changes to the organization, planning, and management of health services. In practice, health system decentralization takes many different forms, depending not only on overall political and administrative structures and objectives, but also on the pattern of health system organization prevailing in the particular country. Decentralization is, therefore, not only an important theme in health management but also an unclear one (Mills, 1990).

General Concepts and Issues of Decentralization

Decentralization has been defined broadly as the transfer of responsibility for planning, management and resource generation, and allocation from the central government and its agencies to: (a) field units of central government ministries or agencies; (b) subordinate units or levels of government; (c) semi-autonomous public authorities or corporations; (d) area-wide regional or functional authorities; (e) and non-governmental private or voluntary organizations (Rondinelli, 1981).

Two major periods of interest in the processes of decentralization in the developing world can be identified (Conyers, 1983). The first, in the 1950s and early 1960s, was closely associated with the transition from colonial rule to
independence in anglophone Africa. Many of the newly independent countries desired a change from the previous, highly centralized forms of government, and sought to establish or strengthen their local governments. In the 1970s and early 1980s, the emphasis of development policies changed from that of maximizing economic growth to one of promoting more equitable growth policies (Rondinelli, 1983). In this latter case, the interest in decentralization was more closely associated with improving national development and increasing the extent of popular participation within it.

Decentralization as an ideological principle has taken many forms in practice. The broad classification developed by Rondinelli in 1981 categorized the major forms of decentralization under four headings: deconcentration, delegation, devolution, and privatization. Deconcentration involves the transfer of some level of government authority to lower levels within central government agencies. Delegation relates to the transfer of managerial responsibility for specifically defined functions to organizations that are outside the regular bureaucratic structure, and, thus, only indirectly controlled by the central government. Devolution embodies the creation or strengthening of sub-national units of government, the activities of which are substantially outside the central government's direct control. Privatization represents the transfer of some government functions to voluntary organizations or private enterprises.

Decentralization is commonly a response to a political imperative. Collins (1989) has pointed out that decentralization should be viewed as both a product and a
determinant of political conflict. The expectations of its potential to yield improvements in a variety of areas are correspondingly high. In his analysis of decentralization, Smith (1985) outlined eight common expectations which often precipitate the desire to decentralize. Decentralization is presumed to:

- be a more effective way of meeting local needs;
- be relevant to meeting the needs of the poor;
- improve access to administrative agencies;
- soften resistance to social change through popular participation;
- reduce congestion at the center;
- be necessary for national unity through local democracy
- enhance civic consciousness and political maturity; and
- mobilize support for development plans.

These high expectations have proved difficult to meet. A growing body of literature indicates that the programs of reform have generally failed to live up to the expectations of governments and the international community alike. In general, the degree of decentralization has been limited. Frequently, it has done little to improve planning and implementation of local development programs. Furthermore, there has been little meaningful increase in the participation of the community (Rondinelli, 1981).

There are numerous reasons for this situation. For example, Werlin (1992) believes that in most developing countries there continues to be hostility to all forms
of decentralization, including the delegation of authority to local and regional
government, financial institutions, public utilities, cooperatives, state-owned
enterprises, and non-governmental organizations. In Bangladesh, Blair (1985) points
out that the imperative for stability brings with it a strong urge for central
administration and control to ensure that stability. This is also true in Indonesia,
according to King (1988). While regional governments have been given broad
powers to undertake planning and management functions, they may be lacking
adequate incentives, financial resources and qualified personnel to carry out these
powers.

In Africa and Southeast Asia, according to Silverman (1990), modernizing
elites feel threatened by decentralization because of the danger of intensifying ethnic
and kinship loyalties. These elites argue that colonialism left them with a weak
national identity and that liberalization and decentralization undermine national unity.
In addition, Bienen (1990), in referring to Nepal, felt it is sometimes feared that
decentralization will open the door wider to local elites who can capture local
administrative and political structures in the absence of strong central authority and
use these structures in anti-democratic, anti-egalitarian ways.

In many developing countries, leaders appear to be more inclined towards
deconcentration than to devolution. Because local councils tend to be dominated by
the field staffs of central government agencies, they have little independent authority.
Inasmuch as officials and politicians at every level of government owe their positions
to those controlling military or one-party systems, the distinction between deconcentration and devolution becomes meaningless (Werlin, 1992).

Collins (1989) stresses that decentralization is not just a technical matter, but a process which involves issues of power and the distribution of resources between social groups. Based on his analytical work in Latin America, he argues that decentralization may in fact reinforce the access to decision making and resource allocation by local dominant groups. He asserts that decentralization may in fact be used as a means of strengthening the position of the central government at the local level.

Excessive centralization rather than decentralization remains a fact of life in many developing countries. Palmer (1987) points out that in many Middle Eastern countries little of any consequence occurs in the administrative setting without the knowledge and direct consent of the supervisor. Because loyalty to the supervisor is more important than meritorious performance, subordinates are discouraged from taking responsibility and showing initiative. Moreover, the incompetence or corruption of subordinates reinforces the unwillingness of senior civil servants to delegate authority to them. Their timidity subsequently stifles existing local and regional governments.

Wunsch (1991) thinks the whole idea of decentralization has not been very successful. He believes that while there have been many decentralization efforts in Third World development (providing resources, training and incentives), their results
have been generally disappointing because careful institutional capability analyses were not carried out.

Silverman (1990) also feels negatively about many decentralization efforts based on his review of African and Southeast Asian experiences. He points out that central governments often escape responsibility for programs by carelessly shifting responsibility for them to local governments. These local governments tend to suffer from the same problems as central governments. And, insofar as they are less able to raise and manage revenue, they are also less likely to provide needed services.

Reinke (1988) believes decentralization of decision making has many advantages in principle, but it is unworkable in practice in the absence of a broadly based cadre of competent managers working within a well-organized framework that promotes coordination, communication, and control based upon adequate flow of selectively useful information.

Perhaps the incrementalism approach of Werlin (1992) to decentralization is more advantageous because it allows more time to adopt to changes. He suggests that pushing change too rapidly is likely to be a mistake. And what works in one place may not work in another. A cautious, experimental approach was successful in Honduras, but an overly cautious and controlled approach was less successful in Malaysia.
Decentralization and the Health Sector

Despite the existence of a considerable literature on the general themes of decentralization, much less has been written about the effects of decentralization on health services. Decentralization has usually been the result of a policy change at the national level. As such, it is initiated across a number of sectors by the central government. The health sector is usually left to conform to a set of reforms which have been generically designed and not specifically fitted to the circumstances of the health sector (Thomason, Newbrander and Kolehmainen-Aitken, 1991).

Mills (1990) stated that the potential advantages of decentralization of health services could be:

- a more rational and unified health service;
- greater involvement of local communities;
- containment of costs and a reduction in duplication of services;
- reduction in inequalities;
- integration of activities of different agencies;
- strengthened health policy and planning functions of ministries of health;
- improved implementation of health programs;
- greater community financing and control;
- improved intersectoral coordination; and
- reduced communication problems and delays.
However, for each potential advantage a corresponding disadvantage is also possible. A decentralized health system may be more inequitable, may make it more difficult to promote national policies, priorities and standards, may intensify existing shortages of trained managers and may be less efficient.

The form that decentralization takes will influence the powers (often termed "discretion") possessed and exercised by a health agency at local level, but it will not dictate the central-local relationship. The actual amount of discretion enjoyed locally depends on the extent of the functions decentralized and on a complex mix of influences, including the size of the country, the level to which authority is decentralized, the composition of any local body given responsibility at that level, mechanisms for community participation, the sources of finance of local levels, budgetary practices, the methods of control and supervision adopted by higher levels, the approach to planning, the attitudes of civil servants to decentralization, and methods of interagency collaboration (Mills, 1990).

Decentralization often demonstrates the need for reorganization and strengthening of ministry of health staff. A common feature is the need to improve its capacity in health planning so that it can formulate comprehensive national policies and plans and detailed guidelines that are suitable for use by regions and districts. Staff at regional and district levels frequently require considerable help from the ministry in how to undertake their new responsibilities. Thus, ministries must be prepared to give considerable management support to staff in regions and districts, in addition to undertaking their own new responsibilities (Vaughan, 1990).
The extent to which health planning procedures can be decentralized may be limited, at least initially, by the availability of planning skills at local level. Decentralization should then include an effort to develop these skills. In addition, planning processes may have to be modified to meet regional and district level conditions and capacities (Mills, 1990).

One thing is certainly clear from global experiences with decentralization in the health sector. And that is the requirement to strengthen national and regional health planning capacity with suitably trained staff and new planning procedures (Vaughan, 1990). There are various philosophical as well as practical approaches that could be utilized to strengthen health planning capacity. These different approaches are generally described as models of development management.

**Development Management**

The field of international development has been through three generations of emphasis or approach. The first generation was concerned with relief and welfare of the masses of people living in the developing world. The second generation was concerned with small-scale, self-reliant local community development. The third generation was concerned with sustainable systems development. All of these iterations of developmental action have failed to produce any profound change in the world of dehumanizing poverty. This has led to a new approach to development.
The new approach to development management has a people-centered vision which
leads to just, sustainable and inclusive improvements in human well-being (Korten,
1990).

This new approach is based on Korten's (1990, p. 67) definition of
development:

Development is a process by which the members of a society
increase their personal and institutional capacities to mobilize
and manage resources to produce sustainable and justly
distribute improvements in their quality of life consistent with
their aspirations.

The core values of this new development management include a belief in
strengthening the capacities of communities to define and solve their own problems in
a supportive, interactive mode. The intent of this mode is to strengthen the capacity
of elements within the communities to solve problems and to take instrumental and
political action. This requires a shift in thinking from simply providing services to
one of building a capacity to define needs and achieve solutions to those needs within
communities (Ickis, 1981). Also included is the belief that people and communities
must be empowered to participate in their own development (Garcia-Zamor, 1985).
Increased opportunities to participate in developmental planning are thought to
improve performance, motivation, and satisfaction with the process.
Thomas (1985) says that this new trend aims to incorporate human-oriented concerns with collaborative developmental planning between the field and central levels. The focus should be toward planning with rather than for development clients.

The underlying concept of this approach has been called social learning after the work of Edgar Dunn (1971). Social learning is based on an expanded understanding of knowledge, which differs from objective knowledge used so successfully in understanding the physical environment. Objective knowledge of our physical environment has been developed by primary reliance on tools of logic and empirical analysis, with the researcher or scientist separated from the subject of the research at a neutral and unbiased distance from the object of attention. Scientific knowledge acquired by a neutral observer (researcher) is utilized in expert-designed plans (often called blueprint planning) and is implemented by "experts" through modern organizational systems and procedures we call bureaucracies. For many tasks in the modern world, scientific knowledge and bureaucracies have proven to be effective instruments. For other tasks, however, they have not been effective (Thomas, 1985).

Social learning alters the traditional roles of researcher/planner/manager and the traditional roles of the clients of change activity. The researcher is no longer a neutral observer of distant facts but is an active contributor to the formulation of new social knowledge. The planner no longer designs only with scientific data and professional expertise but collaborates actively with clients in the formulation of
human-scale plans. The manager no longer acts neutrally to deliver units of service defined from above but actively negotiates human-defined service units acceptable both to clients and to central representatives of the larger political unit (Thomas, 1985).

When social learning theory is applied to international development work, the development agent, whether donor or less developed country government agent, is no longer the deliverer of development to the poor recipient. The agent rather is the possessor of professional expert knowledge which requires joining in a collaborative planning process of the so-called clients development (Thomas, 1985). The values inherent in this process are participation, empowerment, capacity-enhancement, and mutual learning.

The social learning approach has been actively espoused and applied in the field of international development variously as "the learning process" (Korten, 1980), "engaged planning" (Moris, 1972), "the process model" (Sweet and Weisel, 1979), or "transactive planning" (Friedmann, 1981). This study has previously referred to this approach as the developmental, learning process, and Type 2 approach. The key features of this approach again are: flexibility and incremental adaptation, continuous information gathering at the micro-level, experimentation, and iterative learning. The need for this new approach has arisen primarily because (Brinkerhoff and Ingle, 1989), managing socioeconomic development according to highly detailed pre-implementation plans rigidly applied has not shown a high degree of success in generating sustained progress in the world's poorer nations. The characteristics of
the social learning approach are particularly well-suited to the transferring of planning technology to less-developed countries.

**Technology Transfer**

Technology is often needed for the social and economic development of a country. Some nations of the world continue to enjoy economic prosperity but the vast majority are very poor and unable to improve their social conditions in the absence of specific technologies. Increasingly, many countries have recognized the need for technology to improve their conditions. While the development of indigenous technology is to be encouraged, technology transfer is seen as a vital process to alleviate these poor conditions. Technology transfer is, therefore, a frequently sought alternative by less developed countries to improve their socioeconomic conditions (Madu, 1992).

There are several definitions of technology transfer. Derakhshani (1983) defines technology transfer as the acquisition, development, and utilization of technological knowledge by a country other than that in which this knowledge originated. Gigch (1978) posits that technology transfer involves the acquisition of inventive activity by secondary users. The latter definition implicitly incorporates the transfer of "hardware" as well as "software." Software refers to the knowledge base that may be essential in the smooth running of the hardware. Technology transfer may not always involve the transfer of machinery or physical equipment. Knowledge
can also be transferred through training and education, which could include training in provincial health planning as in Papua New Guinea.

The importance of technology transfer for this study is that appropriately adapted western management and planning methods (i.e., the provincial health planning process) can be thought of as a software technology transfer. Furthermore, the specific approach incorporated in the software technology transfer (i.e., the developmental or Type 2 approach) may be particularly relevant to its success or failure to be effectively transferred.

There are various factors that influence the success or failure of technology transfer to developing countries. For instance, in order for any technology to be effectively transferred and maintained in a less developed country, appropriate educational systems and training must be developed. The educational systems and training programs must be adapted to the needs and the problems of the less developed country. Without the proper educational system and training, the receiver will not be able to fully utilize the technology (Madu, 1992).

Cultural differences are important in technology transfer. Copeland (1986) points out that many technology transfer efforts have not worked out simply because they were transplanted without any consideration of the local culture and conditions. Knowledge of and integration of a country's cultural value systems in technology transfer decisions may enhance the successful transfer of appropriate technology. Compatibility needs to be achieved between technology and culture.
Other factors that can influence the success of technology transfer are how the technology is managed, resources available, technological constraints, political and human factors, shortages of data and skilled manpower, and the degree of general socioeconomic development.

Certain things can be done to increase the likelihood of successful technology transfer. Kemball-Cook and Wright (1981) suggest built-in flexibility and maximum participation from the clients themselves. Rodrigues (1985) and Johnston (1981) have pointed out that people are more likely to accept and work toward the successful implementation of decisions in which they actively participated.

Western Management and Planning as Technology Transfer

If the western management process is defined as the activity of planning, initiating and controlling the activities of other people, and if we assume that the organizational technologies accumulated in the West over recent decades render this process a rational and efficient instrument for achieving organizational goals, there would appear to be a clear case for the direct transfer of these techniques into non-western contexts. However, experience has shown that in many cases the transfer of western management and planning technology has had disappointing results (Moris, 1981).

Traditional western management and planning emphasizes hierarchial organizations, formal structure, internal specialization, clearly defined tasks, rational assumptions and techniques, and maximum efficiency (Moris, 1981). Unfortunately,
the environments into which many of the technology transfer attempts occurred have been characterized by ambiguity, interdependence, multiple commitments, and political uncertainty (Ickis, 1981).

In the few cases where western management and planning technologies have had some success, they have also been accompanied by the massive transfer of western cultural penetration. For some countries, this has meant the virtual Americanization of whole sectors of their economy. Examples include Britain, Germany, Spain and the Philippines (Moris, 1981).

Much of the technology transferred has been little more than replications of U.S. designed materials with local names and color added. Serious efforts to base materials and methodologies on local situations, cultures, behaviors, and resources have been rare indeed. Often the efforts failed to take into account the limited educational background of the recipients, their severe time constraints, and their need and desire to learn and assimilate information and techniques of immediate relevance to their daily operational tasks (Paul, Ickis and Levitsky, 1989).

The actual western management and planning technology for which transfer has been attempted has basically been training programs rather than educational programs. Training refers to the process of developing or augmenting knowledge, skills, and attitudes in the person to be applied to the performance of his or her specific work situation; and education refers to a more general process of intellectual development. Training in specific management and planning techniques has been
more amenable to effective transfer than the transfer of western management and its cultural assumptions and contexts (Moris, 1981).

Characteristics of western techniques have been described by Moris (1981) as follow:

1. The interchangeability of organizational resources.


3. Acceptance of the costs of tying expensive facilities and resources to special purposes to ensure their availability at all times for those purposes.

4. Extension of accounting records as a control system impersonally to all aspects of an organization’s activities.

5. Acceptance of internal decision rules governing operations as restraints dictated by technical requisites.


7. Existence of mechanisms that institutionalize the organization’s intelligence separate from the person of individual officeholders.

These characteristics do not exist in many countries, especially in less developed ones, where the transfer of western management and planning has been tried.
The characteristics found in many developing countries are often very different. Moris (1981) has noted some of them as:

1. Norms about hiring and firing may not be enforced, so that recruitment occurs only through personal influence.

2. The distinction between public and private goods is not always maintained, and, in varying degree, forms of corruption are common.

3. Tied resources are often diverted to meet urgent needs in other sectors.

4. While government's efforts are directed toward acquiring new facilities, capital and equipment, the maintenance of existing equipment and facilities is poor.

5. Officials show marked ambivalence about technical matters.

6. Professional norms may be poorly enforced, and professional "standards" are widely suspect.

7. There is an intense internal politicization of the junior officers, who line up beneath various patrons in the hope that they may gain advancement and recognition.

The list could go on and on but the main point is that the transfer of western management and planning has often failed because of the apparent clash of these systems' characteristics and that the transfer did not accommodate these differences.

Reilly (1987) believes the main problems with transferring western management training are that there has not been enough of it, the quality was variable
and too little has been applicable to the public service realities of developing countries. Management training within developing countries suffer the following defects according to Kubr and Wallace (1983):

1. Training is often treated as a discrete event.
2. Few trainees are selected on the basis of greatest need.
3. Competent trainers are rare.
4. Training curricula and materials are usually based on borrowed models and rarely updated.
5. Classroom-based, academic-style teaching still dominates.
6. Evaluation of training goes little beyond taking attendance and assessing the "happiness levels."
7. Most training institutes are poorly financed and managed.

A cynical and perhaps exaggerated view of the reason for the failure of so many western management training programs in the developing world is the "Hombe thesis" as detailed by Reilly (1987). The Hombe thesis is that top managers have an instinct for, and have developed supreme skills in, managing the bureaucratic system to their own advantage. What an external expert will identify as poor management is in practice part of a well-designed strategy.

The Hombe thesis postulates (Reilly, 1987) that the inefficiency and loss of productivity within the organization resulting from these managerial defects is of little concern to those in charge. The position of the elite is entrenched. Ample excuses
are readily at hand to rebut criticism. These include the "colonial legacy"; balance-of-payments problems; adverse patterns of world trade; the "administrative system"; and inefficient, subordinates who, since they are neither trained nor motivated, remain ineffective. A continuing flow of financial and material aid and technical assistance prevent a complete collapse and provide sufficient opportunities for personal profit. It is important to silence the critics to give the appearance of striving towards reform while quietly defending the status quo. The name of the game is to maintain the existing system while advocating reform and providing just enough evidence that change is about to take place to keep the aid flowing.

If this Hombe thesis is even partially true, then it is no wonder that many management training programs have been doomed to failure even before they began.

The specific transfer of western planning technologies has not met with unlimited success either. In many countries plans have been prepared by consultants working on large contracts. These plans were then left to be implemented by local officials (Bor, 1984). This type of planning has led to large gaps in implementation, especially since this style of planning has been only distantly connected to budgetary realities (Staudt, 1991).

However, a new sense of realism seems to be emerging in planning technologies for the developing world. The emphasis is shifting to more modest incremental projects whereby plan making and plan execution are fully integrated and synchronized by expatriate and local professionals working together (Bor, 1984).
The basis for this new realism comes in part from the incremental approach identified by Quinn (1980). He developed the concept of logical incrementalism—incrementalism in the service of overall corporate purposes—and as a result transformed incrementalism into a strategic approach. Logical incrementalism is a process approach that, in effect, fuses strategy formulation and implementation. The strengths of this approach are its ability to handle complexity and change, its emphasis on minor as well as major decisions, its attention to informal as well as formal processes, and its political realism.

The new planning mode focuses on the need to build the capacities of clients in a supportive interactive manner. Important benefits can be gained from the process of planning. Data to forecast beyond the day-to-day political pressures and financial crises can be generated. The early involvement of key decision makers can increase commitment, consensus, coordinating efforts, and perhaps even resocialize the complacent (Bryson, 1988 and Staudt, 1991). It can also lead to broad support, sponsorship and legitimacy. The use of task forces or coordinating committees may help build additional support through consultation, negotiation, and problem-solving.

Brinkerhoff and Ingle (1989) have stated that the successful transfer of western management and planning technologies have been aided by a set of "facilitative conditions." These conditions include:

1. Felt need for change. This is often in the form of a perceived gap between actual and desired performance.
2. Commitment to change, including a willingness to assign resources to implement a proposed solution.

3. Multilevel involvement within the organization and participation of key beneficiaries.

4. Openness to learning; that is, willingness to innovate and take risks in search of results.

5. Continuity of effort; meaning sufficient stability within the environment, and a minimum assurance of resources to enable follow-through on proposed solutions.

These conditions were considered in the design of the provincial health planning process in Papua New Guinea. In view of the above, it would seem reasonable then to spend considerable effort in any technology transfer endeavor trying to maximize these facilitative conditions.

The provincial health planning process that was implemented in Papua New Guinea was based on the knowledge gained from previous experiences of technology transfers. It was deliberately designed to incorporate the successful features of the new developmental or learning process approach. A key feature of this approach was combining the provision of technical expertise with the facilitation of the action-learning process. Technical assistance providers served as catalysts for improving performance and building capacity by working closely with their indigenous
colleagues as team members. This type of action training emphasized learning technical skills by actually practicing them in work contexts.

**Organizational Development**

Many of the efforts in developing health planning and management capabilities have either failed or have met with limited success in the Third World. They have rarely resulted in lasting organizational changes needed to enhance survival in a rapidly changing environment (Blunt, 1990). Korten (1980) believes this is because most of these attempts involved transferring western planning and management technology without adaptation or modification. He believes that the key to success lies in developing a learning process approach which emphasizes broad participation, is flexible and experimental, and builds problem-solving capacities of the indigenous people. This is the core of organizational development.

The focus of organizational development (OD) is on change and is directed towards improving organizational effectiveness and problem-solving capacities. Organizational development is aimed at developing new organizational learning and new ways of coping and dealing with problems. The emphasis is on improving the ways in which the technical, administrative, and personal-cultural systems interact with each other, as well as the way in which the organization relates to the external environment (Margulies and Raia, 1972). It implies that a change in any part of the organization will have an impact on one or more of its parts (Margulies and Raia, 1978).
The main assumption behind organizational development is that it is not possible to equip management with ready-made answers to the problems that are bound to crop up during the various phases of development and existence. What can be done, at best, is to enhance the problem-solving capacity of the organization and to institute a system whereby the organization continues to collect data, analyze problems, and evolve solutions and evaluate their efficiency on a day-to-day basis (Gunatilake and Forouzesh, 1989).

Any organization can be thought of as a system. When viewed as a system, the organization is a complex, identifiable whole consisting of interdependent and interacting elements or subsystems. An organization then would comprise inputs, throughputs, and outputs operating in an external environment. Subsystems would include human, technological, managerial, and cultural subsystems (Margulies and Raia, 1978).

All organizations can be considered to have the same basic elements. Hage and Finsterbusch (1987, p. 11) have summarized these elements as follows:

An organization is a social collective which has existed for at least five years, including at least ten paid employees who work largely full time throughout the year, use essentially the same core technology, and are arranged in a variety of prescribed positions designed to achieve some specific collective output(s).

The provincial divisions of health in Papua New Guinea have all these essential elements and are considered as organizations for this study.
Organizational development as a field came into being in the 1960s and its definitions has been evolving since then. One of the earliest definitions was that of Bennis (1966). He thought organizational development was a response to change, a complex educational strategy intended to change beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges. Beckhard (1969) added to this the ideas that OD is planned, organization-wide, and managed from the top, to increase organization effectiveness and health through planned interventions in the organization's processes using behavioral-science technology.

In 1978, French and Bell (p. 14) offered this definition of OD:

Organizational development is a long-range effort to improve an organization’s problem-solving and renewal processes, particularly through a more effective and collaborative management of organization culture.

In 1984, French and Bell (p. 17) updated this definition with the idea that:

OD is top-management supported with special emphasis on formal work teams, temporary teams, and intergroup culture with the assistance of a consultant-facilitator and the use of the theory and technology of applied behavioral science, including action research.

Burke (1987, p. 53) offers a more concise definition of OD:

Organizational development is a planned process of change in an organization’s culture through the utilization of behavioral science technology and theory.
More recently Schein (1990), states that central to all conceptualizations of organizational development is a concern for change and that change in human systems will not come about without the active involvement of the members of the system that will undergo the change. The job of the trainer, teacher, or leader is to create the conditions that would make such involvement optimally possible, and to act as a facilitator once the learning process was under way. This idea of OD as a highly participatory process involving facilitators was essentially what was used in the provincial health planning process.

There are three historical underlying and guiding frames of reference for organizational development: 1) the action research model; 2) Lewin’s (1951) three-step model of system change, unfreezing, moving, and refreezing; and 3) phases of planned change as delineated by Lippitt, Watson, and Westley (1958).

The action research model, based on the Lewinian tradition of action science, is concerned with group dynamics and organizational science. It attempts both to inform action in concrete situations and to test general theory. Argyris, Putnam, and Smith (1985) think this action science is an inquiry into how human beings design and implement action in relation to one another. Hence, it is a science of practice, encompassing the professional practice of administrators, educators, and psychotherapists as well as the everyday practice of people as members of families and organizations.

According to Lewin (1951), the first step in the process of change is unfreezing the present level of behavior. The second step, movement, is to take
action that will change the social system from its original level of behavior or operation to a new level. The refreezing step involves the establishment of a process that will make the new level of behavior relatively secure against change.

The Lippitt, Watson, and Westley (1958) model of planned change involves five phases: 1) development of a need for change; 2) establishment of a change relationship; 3) working toward change; 4) generalization and stabilization of change; and 5) achieving a terminal relationship. This conceptualization views the change process from the perspective of a change agent; a professional, typically a behavioral scientist, who is external or internal to the organization involved in the change process.

Burke (1987, p. 60) has combined these models into a more general process of organizational development that has these five elements:

1) An outside consultant or change agent

2) The gathering of information (data) from the client system by the consultant for purposes of understanding more about the nature of the system, determining major domains in need of change (problems), and reporting this information back to the client system so that appropriate action can be taken

3) Collaborative planning between the consultant and the client system for purposes of change
4) Implementation of the planned change, which is based on valid information (data) and is conducted by the client system, with the continuing help of the consultant.

5) Institutionalization of the change.

The goals of organizational development are to improve the organizational functioning in two ways: first, to solve existing problems and correct existing deficiencies in the organization's culture and processes; and second, to instill in the client system the capabilities for future problem-solving, self-renewing, and culture managing. The first goal can be attained by appropriate content—make the solutions relevant to the problems. The second goal can be attained by an intervention process done in such a way that the client system builds its own internal capabilities and skills. This is achieved by designing interventions so they have a skill-building or skill-learning component, in addition to the problem-solving component directed to the immediate problem (French and Bell, 1978).

The goals of the provincial health planning process in Papua New Guinea were very similar to these goals of organizational development. The first goal was to solve the existing problem of there being no provincial health plans. The second goal was to build the capacities and skills of the provincial health managers so that they could make their own plans in the future. This process was then an organizational development effort and this study is primarily concerned with how well it worked.
Organizational development efforts can focus on any component of an organization’s formal or informal systems. The formal system is comprised of an organization’s goals, technology, structure, policies and procedures, products, and financial resources. Its informal aspects include its beliefs and assumptions, perceptions, attitudes, feelings, values, interactions, and group norms (French and Bell, 1984). Organizational development efforts focus on both the formal and informal systems.

An organizational development program applies the scientific and practice principles from several behavioral sciences: social psychology, social anthropology, sociology, psychiatry, economics and political science. OD practitioners use the knowledge from personality theory, social psychology, group dynamics, and organizational theory, coupled with knowledge about adult education, planned change, systems theory and operations research (French and Bell, 1978). The practice of organizational development very much utilizes applied behavioral science.

Although OD interventions can be applied to various systems and subsystems within an organization, they are frequently targeted on work teams. This is based on the belief that since organizations work through work teams, that changing the culture, processes, relationships, and ways of performing tasks within these teams is a way to achieve permanent and lasting improvement in the organization (French and Bell, 1984). Many of the early and less successful attempts at OD trained managers in isolation from the dynamics of the work situation. The emphasis today is much more on work teams as the focus of the OD effort.
The techniques and interventions that are available to the OD practitioner are varied. Schein (1990) has counted over 50 techniques. Interventions at the individual level are job redesign and enrichment, training and management development, changes in the quality of working life, management by objectives, and career development. At the group level, interventions might include team building, group processes, problem-solving groups, the installation of autonomous work groups or starting quality circles. Resolving intergroup conflict might be an intervention, as might changing such structural dimensions of the organization as reporting relationships, moving toward or away from decentralization of authority, modifying physical settings, or creating informal structures in the organization (Burke, 1987).

Organizational development is unique to each organization. Every organization has its own distinct cultural milieu and any intervention must be relevant to that particular milieu. Any OD intervention must be appropriate to the evolutionary stage of development of the organization being assisted and must be conducive to measurement.

Organizational development interventions have been attempted in some developing countries. Some of these interventions have been more successful than others. Jedlicka (1987) has studied these past efforts and has identified certain characteristics or conditions that may make the OD interventions more effective. These include a dissatisfaction with the current state of affairs, a perceived need to alter the way things are going, a participative approach, a recognition that people in developing countries are not stupid and are mature, adult, rational individuals,
techniques are not culturally biased and are adapted to the local situation, top
management is committed to the change, in-country institutions are involved, and the
use of indigenous staff as co-facilitators of the change process. These were the basic
assumptions inherent in the provincial health planning process in Papua New Guinea.

More research is needed from field efforts in developing countries to further
refine our understanding of the characteristics or conditions under which
organizational development can be successfully implemented and perhaps transferred
to other contexts. This dissertation is concerned about assessing or evaluating how
well the provincial health planning process, as an intervention, achieved its
objectives. A particular approach to evaluation was selected from the many models
described here. It was based on the fact that the provincial health planning process
was occurring simultaneously in numerous parts of the country and that it was a
highly complex process.

Evaluation

Evaluation is quite an elastic word that covers a wide range of activities. It is
often talked about but less frequently done and even less frequently done successfully.
This could be attributable to the ever increasing conceptualizations and methodologies
related to evaluation and evaluation practices. Intrinsic to all notions of evaluation,
however, is that it involves some kind of judgment of worth or appraisal of value
(Suchman, 1967).
Definitions of Evaluation

There have been various definitions of evaluation and new ones continue to emerge. One of the oldest and most classical definitions of evaluation has been that of the American Public Health Association in its "Glossary of Administrative Terms in Public Health" (1960, p. 225):

Evaluation is the process of determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: formulation of the objective, identification of the proper criteria to be used in measuring success, determination and explanation of the degree of success, recommendations for further program activity.

Inherent in this definition is the process of assigning value to some objective and then determining the degree of success in attaining this valued objective.

Another of the early ideas of evaluation was that it was primarily an exercise to judge merit through the use of explicit criteria in an action setting (Weiss, 1972). Caro (1977) felt that evaluation dealt with making a judgment regarding the degree to which desired outcomes of a program have been achieved. Struening and Brewer (1983, p. 211) offered this definition of evaluation:

Evaluation is the application of scientific principles, methods, theories to identify, describe, conceptualize, measure, predict, change, and control those factors or variables important to the development of effective human service delivery systems.

Babbie (1986) thought that evaluation was a form of applied research intended to have some real-world effect. Reinke (1988, p. 42) suggested this definition:
Evaluation begins at the planning stage with appraisal of alternative courses of action; it extends through the process of implementation as progress is monitored through formative evaluation and remedial actions are taken as indicated; and it includes end-stage summative evaluation of overall program impact.

Isaac and Michael (1989) thought that the accent of evaluation should not be on theory building but on product delivery or mission accomplishment. Its essence is to provide feedback leading to a successful outcome defined in practical and concrete terms. Rossi and Freeman (1990) felt evaluation to be the systematic application of social research procedures for assessing the conceptualization, design, implementation, and utility of social intervention programs. Perhaps all these notions of evaluation are best summed up in the idea of Judd, Smith and Kidder (1991) that evaluation is best thought of as one type of applied research in the sense that it is designed to answer practical, real-world problems about the effects of some policy or program.

Evaluations, since they are conducted in the real-world, are never perfect and there are no perfect methods. There are no rigid rules that can be provided for making data-collection and methods decisions in evaluation. There is no recipe or formula to follow (Patton, 1990). Cronbach (1982) has called evaluation an art involving the exercise of dramatic imagination. This art of evaluation includes creating a design and gathering information that is appropriate for a specific situation and particular decision-making context. The design must be chosen afresh in each undertaking and the choices to be made are almost innumerable. Any given design is
necessarily an interplay of resources, possibilities, creativity, and personal judgments by the people involved. Every evaluation represents, or should represent, an idiosyncratic effort to meet the needs of program sponsors and stakeholders (Cronbach, 1982).

**Purposes of Evaluation**

There are many and varied reasons for evaluation. The overall purpose of evaluation, however, is to measure the effects of a program against the goals it set out to accomplish as a means of contributing to subsequent decision-making about the program and improving future programming (Weiss, 1972). Rossi and Freeman (1990, p. 13) have made this summary of reasons:

- Evaluations are undertaken to judge the worth of ongoing programs and to estimate the usefulness of attempts to improve them; to assess the utility of innovative programs and initiatives; to increase the effectiveness of program management and administration; and to satisfy the accountability requirements of program sponsors. Evaluations may also contribute to substantive and methodological social science knowledge.

Weiss (1972) has described the reasons for evaluation as ranging from the eminently rational to the patently political. The less desirable reasons include postponement, ducking responsibility, public relations, and fulfilling grant requirements. Suchman (1967) suggested two related purposes: eyewash and whitewash. In an eyewash evaluation, an attempt is made to justify a weak program by selecting for evaluation only those aspects that look good on the surface. A
whitewash attempts to cover up program failure by avoiding any objective appraisal. Evaluations can, thus, be conducted from the biases of various perspectives: the program evaluator, the administrator, the consumer, the public, or the organization. For evaluation to be worthwhile, honesty and integrity should be maintained in its undertaking.

General Approaches to Evaluation

Scriven (1967) distinguished between two major approaches to evaluation: formative and summative. Formative evaluation occurs when data are being collected. It produces information that is fed back during the program so that improvements can be made. Baker (1974) described four areas of concern in a formative evaluation: determining the results of a program, diagnosing the weak areas, limiting the number of subjects exposed to new, unproven programs, and limiting the costs of a program.

The World Health Organization (1988, p. 57) listed these purposes for formative evaluation:

- to record what happens, so that those involved, and later, other people, can learn from it
- to identify "sticking points" or problems which arise in the process, so that these difficulties can be tackled and overcome as they occur
- to identify cases of good practice and to share these with people to boost morale and give recognition to those who have succeeded
- to pass on ideas on what to do and what not to do to others.
Summative evaluations, on the other hand, are done to assess the overall effectiveness of a program and the extent to which the program is worthwhile in comparison to other, similar programs. The emphasis is on gathering information to ascertain to what extent the objectives are being achieved and to determine whether the strategies, procedures, or methods being implemented to attain these objectives should be terminated, modified, or continued in their present form (Isaac and Michael, 1989).

Levels of Evaluation

Another way to conceptualize evaluation is that it can take place at various levels of a program or project. The three levels at which a program can be evaluated are: process, impact and outcome. Process evaluation refers to the provision of diagnostic feedback as to the quality and implementation of methods and activities (Candeias, 1991). Process evaluation measures the effectiveness with which a program attracts clients as participants in the program as well as the effectiveness with which staff are able to do their jobs as specified in the program objectives.

Impact evaluation assesses the overall effectiveness of a program in producing significant changes in knowledge, skills, attitudes, and behaviors of the program participants (Candeias, 1991). Impact evaluation is also concerned with the contributing factors related to these changes.

Outcome evaluation involves examining the long-term effects of a program among the program participants. It assesses changes in or reduction of morbidity,
mortality or other health status indicators for a specific group of people (Candeias, 1991).

Models of Evaluation

There are many models of evaluation. Models are developed to help evaluators know what steps to follow and issues to consider in designing and implementing a study. Models are not so much recipes as frameworks. Models help evaluators identify and distinguish among alternative designs and strategies. Salient ones are described here.

1. **Goal-based, Goal-attainment, or Goal-fulfillment Model.** This is the classic and perhaps original model of evaluation. This model of evaluation is concerned with knowing to what extent program goals have been achieved. It starts with a program’s goals and collects data to determine if these goals were met. The program’s success is measured by the outcomes of the program in relationship to the stated goals.

   There are critical issues that must be dealt with in this model. Foremost is the need to have clear, specific objectives that are in fact measurable. Measurement involves the development of indicators of program outcomes. These help to measure the extent to which the goals were achieved. Indicators of relevant aspects of the program-inputs also need to be developed. Intervening factors can come between the inputs and outcomes and indicators for these factors also need to be developed.
This deductive and quantitative model was well-described with all its advantages, disadvantages and designs by Suchman (1967) and Weiss (1972). A primary advantage of this model is that it enables the evaluator to develop a logical progression of steps. A primary disadvantage is the difficulties associated with all aspects of measurement.

The research designs associated with this model are the classical experimental design, quasi-experimental designs (time-series, multiple time-series and non-equivalent control group), and non-experimental designs (one project before-and-after, after only, and after only with comparison group).

2. Systems or Systems Analysis Model. The systems model of evaluation is concerned with establishing a working model of a social unit which is capable of achieving a goal. Unlike the study of a single goal, or even a set of goal activities, the systems model is that of a multifunctional unit. It is concerned with the effective coordination of organizational subunits; the acquisition and maintenance of necessary resources; and the adaptation of the organization to the environment and to its own internal demands (Etzioni, 1960).

In contrast to the goal-attainment model which is concerned with the degree of success in reaching a specific objective, the system model establishes the degree to which an organization realizes its goals under a given set of conditions.

The disadvantage of this model is that it excludes the interest of the program participants and does not always consider the human context of the program or
organization. The advantage of this model is that it is helpful in looking for simple cause and effect relationships (Rubinson and Neutens, 1987).

3. **Goal-free Model.** In this model of evaluation, the focus is on the intended services and outcomes of a program's goals and objectives. Scriven (1972) first proposed the idea of goal-free evaluation. Goal-free evaluation means gathering data on a broad array of actual effects and evaluating the importance of these effects in meeting demonstrated needs. The evaluator makes a deliberate attempt to avoid all rhetoric related to program goals. Only the program's outcomes are studied.

Goal-free evaluation, in its search for actual effects, is an inductive and holistic strategy aimed at countering the logical-deductive limitations inherent in the goal-based model. It is a radical departure from virtually all traditional evaluation thinking and practice.

The major disadvantage of this model is the lack of a clear methodology as to how to proceed. The advantage is its ability to be completely bias-free from predetermined goals.

4. **Responsive Evaluation Model.** Stake (1975) was the first to use the term "responsive evaluation." Responsive evaluation focuses on the issues and concerns of the persons who have a stake in the evaluation. These evaluations orient to program activities rather than program goals, respond to audience information needs rather than predetermined information categories, and consider different values of people interested in the program when judging its adequacy. Questions and methods are not
imposed but emerge from observing the program during the evaluation (Shadish, Cook, and Leviton, 1991).

This type of evaluation requires having face-to-face contact with people in the program and learning firsthand about stakeholders concerns. It is a continuous and interactive process in which new issues can be discovered.

5. **Transaction Model of Evaluation.** House (1978) described this model as concentrating on the educational (program) processes themselves. It uses various informal methods of investigation and has been drawn increasingly to the case study as the major methodology. It treats each case as unique and places prime emphasis on perception and knowing as a transactional process.

The transaction model has the advantages of providing rich and persuasive information based on program participants and other people removed from the program, representations of diverse points of view and different interests, and the potential for being accurate and coherent (Rubinson and Neutens, 1987).

6. **Connoisseurship Model of Evaluation.** Connoisseurship evaluation places the evaluator’s perceptions and expertise at the center of the evaluation process. In this model, a judge is used to determine the effects of a program, just as an art critic might write about a painting, so will the connoisseur of program evaluations. Connoisseurship consists of recognizing and appreciating the qualities of a program. The connoisseur writes about that program, in short, rendering a critique of that particular program (Eisner, 1985).
Connoisseurship has the advantage of adding another way to accomplish and augment an evaluation. It provides an expert review that, although biased, can detect weaknesses, flaws and strengths of programs. The disadvantages include how and why the evaluator decides on the criteria and whether or not these criteria will be acceptable to those in the program.

7. Fourth Generation Evaluation. Fourth generation evaluation is a marriage of responsive focusing--using the claims, concerns, and issues of stakeholders as the organizing elements--and constructivist methodology-aiming to develop judgmental consensus among stakeholders who earlier held different, perhaps conflicting constructions. (Guba and Lincoln, 1989). A major goal of fourth generation evaluation is to be educative, to open a discourse leading to possible reconstruction based on added knowledge or sophistication. It is meant to create an environment for action that is almost impossible to achieve in any other way. Fourth generation evaluation is a means to empowerment, both because of its process aspects and because it shares information (Guba and Lincoln, 1989).

Fourth generation evaluations are sociopolitical, joint, collaborative, teaching/learning, continuous, and highly divergent processes. These evaluations should lead to shared responsibility, comprehension, and action. Guba and Lincoln have spelled out the twelve steps of this type of evaluation in elaborate detail in their 1989 work on fourth generation evaluation.

Guba and Lincoln (1989) have described their conceptualization of evaluation as having four distinct generations as classified by the evolving role of the evaluator.
The first generation saw the evaluator in the role of technician who was skilled in conventional measurement and data analysis techniques. The second generation evaluator was a describer who detailed patterns of strengths and weaknesses in the attainment of specified objectives. The third generation role of judge revolved around the necessity for drawing conclusions about the evaluator's success, effectiveness, or utility and about making recommendations to improve the evaluation so that it might be more successful. The fourth generation evaluator's role includes all the above but adds the roles of collaborator, investigator, reality shaper, and change agent.

Qualitative Evaluation

One of the major developments in evaluation during the last twenty years has been the increasing utilization of qualitative methods. This has occurred not as a repudiation of the more traditional quantitative methods but more as a recognition that evaluation is such a complex endeavor that additional methods of merit are needed for greater insight and understanding. This has been based on the growing conceptualization that evaluation is a dynamic process that seeks to understand programs as multi-dimensional phenomenon occurring in naturalistic settings (Patton, 1980). A more discovery oriented approach which emphasizes a holistic view and inductive methods is required.

Guba and Lincoln (1981) and Lincoln and Guba (1985) refer to this type of evaluation as a "naturalistic inquiry" because it recognizes that all programs occur in
specific and unique natural settings or contexts. They posit that all human behavior is context relevant and cannot be evaluated in isolation from its unique context. This type of evaluation of programs in their natural settings requires the use of qualitative methods like in-depth, open-ended interviews, direct observations, and written documents.

Qualitative methods permit the evaluator to study selected issues, cases, or events in depth and detail (Patton, 1987). They are particularly suited to evaluations of education programs, policy analysis, and organizational development (Patton, 1990). The evaluator uses qualitative methods to capture the richness of people’s experiences in their own terms. Understanding and meaning emerge from in-depth analysis of detailed descriptions and verbatim quotations. The task for the qualitative evaluator is to provide a framework within which people can respond in a way that represents accurately and thoroughly their point of view about the program.

A Paradigm Revolution

This increased recognition of the merit and use of qualitative methods in evaluation has helped focus a long-standing epistemological debate about how best to conduct research and evaluation. There are two fundamentally different and competing inquiry paradigms.

The first is called the conventional, scientific, or logical-positivist paradigm. It proposes the use of quantitative and experimental methods to test hypothetical-deductive generalizations. The second is called the phenomenological or
constructivist paradigm. It proposes the use of qualitative and naturalistic approaches to inductively and holistically understand human experience in context-specific settings.

Lincoln (1992) believes that a paradigm shift or revolution is taking place regarding the nature of research and evaluation. She feels there is a definite shift in the philosophy of inquiry to the constructivist paradigm, especially in the health sciences. She believes this is necessary because health is being redefined in terms of wellness instead of the absence of disease and that the traditional methods of inquiry fall short in their evaluations of this new definition.

Patton (1990), on the other hand, warns against the tyranny of a particular paradigm in favor of pragmatism. He believes that a one-sided paradigm allegiance is too restrictive and argues for evaluators to increase their options rather than reduce them on philosophical grounds. He stresses the value of a "paradigm of choices" and recognizes that different methods are appropriate for different situations.

Evaluation of Training Programs

Training programs, particularly management development training programs in the international context, are frequently not evaluated even though there is a need for continuous evaluation to ensure that they are effective and responsive to the people being trained. Only in a few cases are there full evaluation of courses and follow up of training to find out the extent to which the trainees have put into practice what
they have learned. Only through such continuous evaluation can the training be improved and the quality raised (Paul, Ickis and Levitsky, 1989).

Most evaluation of training programs have focused on informal, casual observations and impressions of facilitators and course participants. These types of evaluations have been quite self-serving as the training organizers or institutions are looking for favorable and reassuring results. It is no wonder such evaluations never get beyond the "happiness index" of describing the air-conditioning, the food served at lunch, and the daily stipend or allowance. Evaluations done for assessing the impact of training are still in the primitive stages (Gunasekera, 1989).

Evaluations that can help define the impact of training are desperately required. Gunasekera (1989) believes such evaluations should address three basic interests:

1. Is the training experience of any significance to the trainee and his or her organization? Is it recognized as training?
2. Does it have any particular impact on the trainee and his or her environment?
3. How could that impact (if positive) be increased?

These three interests are related to the different levels of evaluating training programs. Phillips (1983) has described four levels of evaluation:

1. Reaction. Reaction is defined as what the participants thought of the program, including materials, instructors, facilities, organization and methods. It does not include a measure of the learning that takes place.
2. **Learning.** This level of evaluation is concerned with measuring the learning of principles, facts, techniques and skills presented in a program.

3. **Behavior.** This refers to the extent to which the knowledge, skills, abilities, and attitudes acquired during the program influence on-the-job performance.

4. **Results.** Evaluations at this level are used to relate the results of the program to organizational improvements such as cost savings, increased productivity and quality changes.

Unfortunately, most evaluations of training rarely get beyond the levels of reaction and learning. This is primarily because evaluations of behavior and results are more difficult to do and, thus, seldom undertaken. More emphasis needs to be placed on ex-post evaluations that attempt to measure change that has occurred as a result of a training program. Such changes might include behavioral change of participants as observed by their supervisors or obtained through peer ratings; or organizational change that occurs as the result of their introducing innovations (such as new health planning technology) that may be observed and documented.

What then are the evaluation methods to consider in trying to assess the impact of training programs? The evaluation would need close interaction with the clients or participants in order to understand the meaning of the training activity from their perspective. Jayawickramarajah (1992) suggests the case study as a legitimate approach for evaluating training programs. He prefers case studies using interviews, participant observation, and documentary analysis. He believes the use of these
qualitative methods can contribute to better understanding of the complex nature of programs and enhanced credibility of evaluation results.

Gunesekera (1989) also favors qualitative methods for evaluating training impact. He specifically recommends the interview in a process he calls "generating a structured conversation." It is a labor intensive method involving interviewing people in their workplace using a checklist. The creation of the checklist is the main familiarization exercise for the evaluator as it tries to make a comprehensive "question picture" of the training experience. The idea is to map out a range of ideas that can be probed to facilitate the interviewee's thinking and understanding of his or her past experience. This approach is based on flexibility as it encourages ex-trainees to explore the possible links between their training experience and their subsequent competency which may reveal examples of impact and course effectiveness.

The provincial health planning process in Papua New Guinea was a very multi-dimensional phenomenon occurring naturally in numerous sites and under differing conditions across the country. The magnitude of this complexity necessitated the development of an evaluation strategy that could combine elements of various definitions, purposes, approaches, models, and levels of measurement. No single conceptualization of evaluation was adequate to assess all the dimensions of the provincial health planning process. The evaluation strategy that was developed was eclectic and uniquely designed for the specific conditions of this study.

The design developed was based on a definition of evaluation that was concerned with some form of measurement of program success in achieving pre-
determined objectives. The purpose was not to build theory but rather to be an applied effort at measuring the relative success of the provincial health planning process in meeting its objective.

The design included aspects of the formative and summative approaches to evaluation. It was formative in the sense that it was concerned with producing information that could be fed back into the process so that improvements could be made. It was summative in the sense that it was concerned with the overall effectiveness of achieving stated objectives.

The design utilized the evaluation levels of process, reaction, learning, and behavior or impact. The evaluation wanted to find out how well the provincial health planning process achieved its objectives and what the associated factors were according to these levels of evaluation. Each level was to show a different perspective of the entire process. The level of outcome evaluation was not selected as changes in health status due to program interventions are considered to be long-term effects and beyond the scope of this study.

The evaluation model utilized was generally the goal-based model in that a determination was undertaken to measure if program objectives were met. It included elements of the responsive model since the emphasis was on the stakeholders or program participants perceptions of events. It also included transaction model elements since it was concerned with the educational processes experienced by the participants.
The evaluation strategy relied primarily on qualitative methods. In-depth interviews and documentary analysis were used for their flexibility and capacity to capture feelings and perceptions of the participants. A discovery mode was employed to find out from the participants how well the process achieved its objectives and what were the associated factors.

Qualitative methods have been increasingly recognized as suitable for evaluations of complex programs taking place in real world settings. These methods also are appropriate for evaluating educational/training programs, especially at the levels of reaction, learning, and behavior. The specific techniques used for the evaluation’s data collection were a "structured conversation" with the ex-trainees and a documentary analysis.

The evaluation strategy was a hybrid or mixture of approaches, ideas, and techniques designed to measure and aid analysis of a complex and dynamic process.

Summary of Literature

The review of the literature for this study covered many diverse constructs, concepts and areas related to this investigation. The review discussed the merits of decentralization of health services in developing countries. While there are advantages to decentralization, it has not been shown to have been a universally positive experience. Decentralization may not be an effective model but it has not yet been systematically evaluated. There are forces of resistance to decentralization and often times the necessary cadres of well-trained staff do not exist to efficiently
implement policies of decentralization. Lacking in the decentralization literature are examples of training programs that were designed to strengthen skills in peripheral health workers. Assessments or evaluations of such training programs have either not yet been done or have not been documented.

The review covered the major approaches to development management. Emphasis was placed on the evolution of the developmental or learning process approach as the most promising for the effective transfer of technology to less developed countries. There are numerous cases of technology transfers that were not successful. There are few examples of transferring health planning technology through the social learning approach. This dissertation provides some evidence as to the effectiveness of this approach in the transfer of "software" or training technology.

The literature of OD was review from its historical beginnings and the basic tenets were distilled to being interventions designed to help clients solve current problems while building the capacity to solve future problems. There is a paucity of examples of successful OD interventions in developing countries. The provincial health planning process was an OD intervention and its assessment gives evidence as to the characteristics for successful organizational development.

Numerous models of evaluation were described with their strengths and weaknesses. Evaluation was traced from its early emphasis on quantitative and experimental designs to the more qualitative and naturalistic emphasis gaining recognition in the health and social sciences of today. The trend is certainly towards more options in evaluation designs and multiple measures of events. The case study
methods is appropriate for qualitative evaluations, especially those concerning programs occurring in more than one site and under differing sets of conditions. More and more qualitative case studies are being used for evaluations in public health programs, not only to supplement quantitative data, but to provide keen insight into how program participants perceive activities.

Evaluations of training programs in developing countries have often not gone beyond the superficial level of feedback. The literature on this topic cited a lack of studies that involved the in-depth interviewing of training program participants after their courses. Evaluations concerned with behavioral changes and follow up after training have often not been done. There is a gap in the literature on training evaluation in developing countries, particularly of management and planning training programs using the social learning approach.

The provincial health planning process in Papua New Guinea is a complex microcosm of issues in decentralization and development, organizational development, technology transfer, training, and evaluation. All of these interrelated themes, complex in and of themselves, were also examined in a naturalistic, dynamic setting involving human beings in their real world work environments. This study addresses some of the gaps in these areas of literature and documents the experience of Papua New Guinea in provincial health planning as a social learning, organizational development intervention in technology transfer.
Research Design

The research design utilized in this study was a descriptive, exploratory and evaluative, multiple site, case study design. It was cross-sectional in nature and employed both qualitative and quantitative analyses. It included both formative and summative aspects of assessment. The examination focused on four of the provinces where the provincial health planning process was fully implemented. Each of the four selected provinces represented a mini-study itself and all four cases taken together represent a holistic appraisal of the provincial health planning process in Papua New Guinea. The design allowed for individual mini-case analysis, cross-case analysis, documents review, aggregated findings, and descriptive statistics.

The study was designed to provide a "thick description" (Geertz, 1973) of the provincial health planning process as it evolved in Papua New Guinea. It aimed to provide detailed, descriptive data to gain deeper understanding of the perceptions, feelings, and knowledge of the people mainly through in-depth, intensive interviews. The intent was to explain descriptive patterns, looking for relationships and linkages among descriptive dimensions (Patton, 1987).

The study design was exploratory rather than causal. It was designed to study the complex array of factors that were associated with the provincial health planning process. It also aimed to explore which factors were associated with the relative success or failure of the process. It explored the process in four naturalistic, unique
settings in an external environment of decentralized health services. Because there was no attempt to control variables, no causal or explanatory relationships have been suggested.

The study had a emphasis of assessing or evaluating how the process progressed in achieving its stated objectives. In this regard, it had an element of a summative evaluation because it tried to ascertain whether and how well the objectives were actually achieved in four of the provinces. Since the provincial health planning process is still occurring in some of the provinces, the findings of this study can be fed back into the operations of the process to improve its functioning. In this regard, it had an element of a formative evaluation since information gathered can be directly applied in enhancing an on-going program.

The provinces studied were visited at different times. They had all completed the health planning process. No attempt was made to try to capture the essence of the process in each province during different times of its implementation.

The design chosen was a multi-site case study design. Case study research designs are suitable for organizational and management studies. Due to the complexity of organizational phenomena, the case study may be the most appropriate method (Yin, 1989). The case study is a common research strategy in psychology, sociology, political science, education, and planning. It allows an investigation to retain the holistic and meaningful characteristics of real-life events—such as individual life cycles, organizational and managerial processes, neighborhood changes, international relations, and the maturation of industries. The case study design
enables one to gain an understanding of other people's perceptions of the world. It can yield rich and persuasive information on program participants and other people removed from the program, represent diverse points of view and different interests, and be accurate and coherent (Rubinson and Neutens, 1978). The unique strength of the case study method is its ability to deal with a full variety of evidence-documents, artifacts, interviews, and observations (Yin, 1989).

A workable definition of case study as a research strategy was given by Yin (1989 p. 23) as:

> an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

Internationally, the value of conducting case studies is now recognized by such development agencies as the World Bank (Salmen, 1987). In the past, economists and quantitative social scientists dominated the assessment and evaluation efforts of international development agencies. They preferred large-scale quantitative surveys and probabilistic sampling techniques. But years of experience with those approaches has shown that the data management problems of implementing large-scale efforts in Third World settings were typically so severe that validity and reliability were in serious doubt. The data could not be trusted and it was so expensive to collect such data that little money or time was usually left to analyze the data. As a result, such international evaluation experts as Michael Cernea (1985, 1989) of the World Bank
and Nena Vreeland (1989) of the U.S. Agency for International Development are advocating much greater use of case studies, largely for practical reasons. Case studies are manageable, and it is more desirable to have a few carefully done case studies with results one can trust than to aim for large, probabilistic, and generalizable samples with results that are dubious because of the multitude of technical, logistic, and management problems in Third World settings (Patton, 1990).

Particularly advantageous features of case study evaluation designs are that they can combine qualitative and quantitative data, secondary data, direct fieldwork, project documents, interviews, and observations to draw policy-relevant conclusions. A case study evaluation seeks to capture what people have to say in their own words. A number of case studies in a sector (health) can then be synthesized to draw still larger conclusions about development processes more generally (Tilney and Riordan, 1988). All of these synthesis studies can generate concrete recommendations, advice to managers, training plans, or other practical results.

The emphasis in case study research is not so much on traditional sampling methods as it is on the selection of "information-rich cases" for study in depth (Patton, 1990). Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research.

Case studies are not meant to provide statistical generalizations. Case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. Case studies are not meant to "represent" a larger pool of respondents. They "represent" themselves as unique, whole occurrences (Yin, 1989).
The case study research design does not use sampling in the traditional sense. Each individual case study consists of a whole study, in which convergent evidence is sought regarding the facts and conclusions for the case; each case's conclusions are then considered to be the information needing replication by other individual cases. Each individual case should indicate how and why a particular proposition was demonstrated (or not demonstrated). Across cases, there should be an indication of the extent of the replication logic and why certain cases were predicted to have certain results, whereas other cases were predicted to have contrary results (Yin, 1989).

Case studies most often utilize what is called purposeful sampling in which the intent is to select information-rich cases whose study will illuminate the questions under study. You select the cases which you think you can learn the most from. They are worthy of in-depth study (Patton, 1990).

Case studies have a distinctive place in evaluation. They help to describe the real-life context in which an intervention has occurred. They can be used to explore those situations in which the intervention being evaluated has no clear, single set of outcomes (Yin, 1989). Case studies are particularly valuable when the evaluation aims to capture individual differences or unique variations from one program setting to another (Patton, 1987). Case studies are not appropriate for experimental research with controls or research designs calling for large population samples.

The multi-site case study design was used in this investigation. Multi-site case study designs are considered to be more robust and to provide more compelling
evidence that single site case studies. Multiple site case studies are considered as multiple experiments and follow a replication logic rather than a sampling logic. The aim is for analytic generalization rather than statistical generalization. Multiple cases would help define the conditions under which a particular phenomenon is likely to be found as well as the conditions when it is not likely to be found.

Quantitative as well as qualitative methods can be utilized in case study research designs. The use of different types of data can lead to more complete research results. They can provide a more comprehensive understanding of the findings. Case study designs often rely primarily on qualitative methods and data, however. Qualitative methods are necessary to capture the unique diversities and contrasts that emerge as local programs adapt to local needs and circumstances. These variations are not such that they can be fully captured and measured along standardized scales; they are differences in kind, differences in process, in implementation, in politics, in context, in outcomes, and in program quality. To understand these differences a case study evaluation picture of each unique site (province) is often insightful.

Qualitative data consist of detailed descriptions of situations, events, people, interactions, and observed behaviors; direct quotations from people about their experiences, attitudes, beliefs, and thoughts; and excerpts or entire passages from documents, correspondence, records, and case histories.

Quantitative approaches tend to produce uniformity of measures that can be applied across a program(s). However, they are unlikely to capture differences
because they aggregate findings and do not go into the same level of detail as possible in qualitative methods. Qualitative methods permit documentation of program differences, idiosyncrasies, and uniqueness. If decision makers and information users want to understand variations in program implementation and outcomes, qualitative case studies of local programs can provide such detailed information.

Data about site-to-site variability can also be useful in planning later comparison studies, in developing models of local program operation, and in understanding different dimensions of need, demand, and potential service. Where the focus of the evaluation question is on understanding and documenting local adaptations of multiple-site programs, qualitative methods are highly appropriate and potentially quite useful (Patton, 1990).

The multi-site case study design in this investigation utilized both quantitative and qualitative methods and data to provide more mixed measures of the provincial health planning process.

Several issues related to validity were addressed. To strengthen the construct validity of the study, multiple sources of evidence were used; in-depth interviews, participant observations and records reviews. Internal validity was not an issue since the study was meant to be descriptive and exploratory rather than explanatory or causal. External validity was not an issue either since the multi-site case study design is meant to make analytic generalizations and not statistical generalizations to any specific populations, settings, or experimental variables.
To strengthen reliability, the same protocol and instrument were used by the same investigator who personally conducted all the interviews.

**Sampling/Study Groups**

The selection of the four provinces as cases for this investigation was done with several explicit reasons in mind. The reasons were that they were the first four provinces to undergo the provincial health planning process and, thus, had the longest possible exposure to the effects of the process, and that each province was from one of the four very distinct geographic regions of Papua New Guinea.

Papua New Guinea is divided into 19 decentralized provinces each having their own division of health headed by the provincial assistant secretary for health. The provinces are grouped into four regions for administrative, social and ethnic reasons. The regional groupings of provinces are as follow:

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For this study, the four provinces selected as cases were New Ireland, Madang, Western Highlands, and Oro for the previously stated reasons.

In each of the four purposely selected provinces, the Assistant Secretary for Health and the provincial sectional heads for each division of health program area were interviewed. These sectional heads are referred to interchangeably as program managers in this study. The program managers included the following: disease control officer, sexually transmitted disease control officer, tuberculosis and leprosy officer, mental health officer, primary health care coordinator, health educator, community health nursing supervisor or matron, family planning sister, nutritionist, urban clinic sister, malaria supervisor, provincial health inspector, water supply officer, food inspection officer, hospital matron, hospital medical superintendent, hospital secretary, radiographer, dental officer, health information officer, inservice coordinator, provincial health extension officer, and church health services coordinator. Some provinces have slightly different titles for their program managers but functionally they are the same.

All of these health workers were trained either as medical officers (doctors), health extension officers, health inspectors, nurses (sisters), dental officers (dentists), or radiographers.

The Medical Officers were qualified as physicians. The Health Extension Officers, however, are the backbone of the health system in Papua New Guinea where there is an acute shortage of medical officers. These extension officers are basically high school graduates with three years of clinical experience gained at the
College of Allied Health Sciences. Within a large majority of health facilities, they are the senior clinical staff as well as the officer-in-charge of the facility. Health inspectors are high school graduates who also complete a three-year training program in environmental and occupational health at the College of Allied Health Sciences. Nurses are also high school graduates who complete a wide variety of religious as well as government run nursing schools around the country. They are referred to as sisters. Senior or supervisory sisters are called Matrons.

All four of the provincial Assistant Secretaries for Health were interviewed along with as many of the provincial program managers as were available. No district level health staff were included in the interviews because they were not residing in the provincial capital cities. A total of 52 in-depth interviews were conducted.

In addition to the interviews, a diverse assortment of documents were reviewed for emerging patterns in each province. This unobtrusive measure consisted of reviewing the following types of documentary evidence: the current health plans (in draft and final forms), provincial health administration acts and relevant legislation, previous health plans and planning documents such as reports and summaries, memorandum and minutes from any health planning meetings or organizational structures. It was hoped that this would give some insight into previous planning, experiences, and its quality.
The predetermined objectives of the provincial health planning process were to help the provinces develop health plans, build health planning skills, and enhance the problem-solving capacities of the provincial divisions of health. The research questions of this study were to determine the relative success or failure of the provincial health planning process in achieving each of these objectives and to define what factors were associated with success or failure. In addition, the study was aimed at learning about particular factors that were important in transferring this health planning technology in Papua New Guinea and which may have merit in transferability to other situations and countries.

To achieve these research objectives, a semi-structured interview (Appendix B) was developed consisting of 21 items with both open-ended and closed-ended questions. The open-ended questions were intended to obtain qualitative data and the closed-ended questions were intended to obtain quantitative data. In addition, a review of relevant documents was conducted in each province to supplement and validate data and information collected from the interviews. This was done by reading through all the available documents. All these documents were studied in order to provide cross-validation of the research findings.

The interviews were conducted as "structured conversations" (Gunasekera, 1989). This approach permitted the same core questions to be asked without being too rigid about disrupting the natural flow of the interview. Appropriate probes were asked when more detailed information was needed to provide greater illumination on
a particular question or issue. The investigator personally conducted each of the 52 interviews during a five-month period.

The semi-structured interview instrument was divided into three parts. Part A was designed to examine the factors related to the provincial health planning process in each province as well as the degree to which a provincial health plan was completed. Factors examined included participation, ownership, the training modules, the facilitators, inter-workshop or post workshop technical support, and political support. This section included nine questions with nominal and ordinal measures of the various factors. It also provided extensive opportunities for the interviewee to describe and discuss the success or failure of each factor in helping achieve the objectives of the provincial health planning process. This permitted the interviewees' not only to comment on the factors raised but to also comment on any other factors or concerns that may have influenced the provincial health planning process. It also contained one question regarding the interviewees overall perception or appraisal of the process.

Part B addressed individual health planning skills. This section consisted of eight questions containing ordinal measures and open-ended questions on the self-reported attainment of health planning skills. Ordinal measures were used for each of the following health planning skills: using health data (analyzing/interpreting), developing goals, objectives and indicators, priority setting, formulating strategies, preparing activity plans, and preparing fully-costed budgets. Open-ended questions were concerned with the interviewees self-reported ability to use these skills on the
job after the workshops and their self-confidence in developing another health plan in the future.

This section was designed to measure the level of learning skills that occurred during the provincial health planning process. It also was intended to measure the level of behavioral change that occurred as the interviewees were able to use and transfer the skills learned in the workshop to their daily job performance.

Part C was concerned with organizational development. This section consisted of four questions containing ordinal measures and open-ended questions on the self-reported attainment of organizational development and change. Ordinal measures were used for each of the following components of organizational development: teamwork, participation and collaboration, the ability to introduce planned change, and problem-solving capability. Open-ended questions were concerned with why and how each of these components of organizational development may have been enhanced and strengthened.

This section was designed to measure the level of organizational development that occurred during the provincial health planning process. It was also intended to measure and determine the reasons as well as how any organizational development actually occurred.

The responses from the nominal, ordinal, and open-ended measures were then examined with the information gathered from the documents review. This provided both quantitative and qualitative data regarding the provincial health planning process in Papua New Guinea.
The semi-structured interview instrument was initially designed by the investigator. A draft form was circulated for review with the staff of the National Department of Health, other facilitators, and faculty from the University of Papua New Guinea for comments. Discussions were held with some of these individuals who had suggestions for improvement. This review resulted in minor changes in the instrument. Some wording was revised as well as the sequence of some of the questions.

The instrument was pre-tested in Rabaul, East New Britain Province in June, 1992. The pre-test was with the Assistant Secretary for Health and his program managers who participated in the provincial health planning process. East New Britain Province was selected because it was one of the earlier provinces to have gone through the process and it was not one of the case study provinces. The results from the pre-test in the field showed that the instrument could measure dimensions of the process and comprehensible to the interviewees. The only change made was a different ordering of the question sequence which led to better logic, smoother flow, and understanding.

**Data Collection**

The full cooperation of the Secretary for Health of the National Department of Health was obtained in writing (Appendix A). He promised the full support of his department and of the provincial divisions of health. Each of the four Assistant Secretaries for Health in the case study provinces were sent copies of the Secretary's
letter of support and were individually telephoned to ask for specific permission to enter the provinces to conduct the study. After approval was granted from each Assistant Secretary, their advice was sought as to the best time to visit their respective provinces.

Data collection took place between July and December 1992. One week was spent in each of the four selected provinces conducting the research as follows: July-New Ireland Province, October-Madang Province, November-Western Highlands Province, and December-Oro Province. The investigator conducted all of the data collection.

After confirming with the Assistant Secretary for Health of each selected province regarding the most convenient time, the investigator proceeded to travel to the provinces for data collection. Upon arrival in the provinces, the investigator first met with the Assistant Secretary for Health to review the purpose of the study and to reconfirm his support. Following this, the Assistant Secretary notified all his program managers to be available during the week for the interviews. The cooperation of the provincial Assistant Secretaries for Health was crucial to the successful conduct of the study. Fortunately, they were all very supportive and cooperative. As a result, all the data collection was carried out exactly as planned and there were no problems nor any need to reschedule any of the visits.

The actual interviews were conducted in the provincial health office surroundings. Interviewees were informed that their names would not be disclosed. The Assistant Secretary for Health in each province was the first person interviewed.
Each subsequent respondent was interviewed privately in his/her office. It was hoped that these familiar surroundings would ensure comfort and a relaxed atmosphere.

The Assistant Secretary either called a staff meeting to announce the purpose for the investigator coming or personally escorted the investigator to each of the program manager’s offices.

The Assistant Secretaries and the program managers seemed quite pleased to be interviewed and cooperated fully. They appeared to be happy and proud that someone felt that their opinions, ideas and feedback were important and worthwhile. They often commented that nobody was ever interested in their views about things and were glad to be able to share their thoughts with the investigator. Many were surprised that the investigator took the time to travel to their provinces in order to conduct the study. Not a single person refused to be interviewed.

A total of 52 in-depth interviews or "structured conversations" were conducted during the four weeks of field research. The interviews lasted from 30 minutes to one hour each but averaged about 45 minutes. The shortest interview was only 20 minutes and the longest was almost two hours. An approximate time of 39 total hours was spent on the interviews. About 95 percent of the interviews were conducted in English and 5 percent were conducted in Papua New Guinea "Tok Pigin," the national local language. Sometimes when a concept or question was not clear, the investigator explained in "Tok Pigin," then continued the interview in English.
All the interviewees cooperated and expressed their positive and negative feelings about the provincial health planning process. No one refused to be interviewed. Many interviews contained strong feelings, both good and bad.

During the interviews, the investigator wrote down verbatim what the interviewees said. No attempt was made to edit for grammatical sense. As the interviewees spoke, the investigator furiously copied down everything they said exactly how they said it. Nuances, tone, mood, and impressions were also noted. Painstaking effort was made to record everything as precisely as possible to capture the feelings, perceptions and meanings of the words in the interviewees own reality context. It was definitely an advantage that the investigator has lived and worked in Papua New Guinea for over three years and was very familiar with the provincial health planning process.

At the end of the 52 interviews, elaborate field notes were compiled in raw, unedited form. Notes were recorded while reviewing the relevant planning documents. These completed interviews and notes were the basis for data management and analysis.

Data Management and Analysis

The study produced both qualitative and quantitative data from the interviews and the review of the documentary evidence. The qualitative data were analyzed by looking for categories, tabulating similar occurrences, developing themes, or otherwise recombining the evidence to produce meaning and insight to the research
questions. The quantitative data was analyzed by using EPI INFO, Version 5.01. This is a series of microcomputer programs for handling data in questionnaire format. It was developed by the World Health Organization and the U.S. Centers for Disease Control in 1990. The questionnaire and the data from the interviews were entered onto a desktop computer using the EPI INFO software. Descriptive statistics were run on this software.

The data analysis was done in four distinct parts: (1) individual mini-case studies for each of the four study provinces, (2) a cross-case analysis comparing and contrasting each of the study provinces, (3) a summary of the documents review, and (4) the aggregated quantitative data was analyzed by use of descriptive statistics.

Individual mini-case studies were written on New Ireland, Madang, Western Highlands, and Oro Provinces. These mini-case studies were unique and complete unto themselves. The raw and rich qualitative data from the interviews and field notes were used to develop common dimensions, themes, and categories for analysis in each of the mini-cases by listing and studying individual responses. Analysis was done by sorting out the interviewees own words and descriptions of what actually happened in each province, what were the factors associated with the relative success or failure of the planning process, and why and how they were associated. The mini-case studies were illustrated and illuminated by particularly poignant and insightful verbatim passages. This was done in a discovery mode and somewhat inductively as the patterns began to emerge from the raw data and quotations.
The cross-case analysis was done by comparing and contrasting the main themes and patterns with each of the mini-case studies. Similarities, differences and uniqueness were noted and possible explanations offered. General patterns of observations evolved from these cross-case comparisons. Replications of findings were sought for each of the individual mini-case studies as well as insight as to what conditions can more success be expected.

The documents reviewed included memorandum, minutes, and correspondence related to the planning process in each province. Also examined for relevant insights were any previous health plans, annual reports and summaries. If there were any Provincial Health Acts or similar legislative documents, they were studied as well. And of course, the provincial plans themselves, in various stages of draft and final forms, were carefully scrutinized for evidence of planning skills.

And finally, the ordinal level questions from the interview were aggregated and analyzed using the descriptive statistics of the EPI INFO software. This provided analysis on the achievement of the planning process as a sum of the responses from all the provinces.

These multiple measures provided a convergence of analysis of the provincial health planning process in Papua New Guinea. What may have been missed in one measurement method was hopefully captured and recorded through one of the others.

A summary analysis was done on the overall success or failure of the provincial health planning process in achieving its objectives. Associated factors
were identified and described. A set of conditions for the success or failure of the process was discovered as well as an identification of the conditions that may have led to more successful process outcomes.
CHAPTER 4
RESEARCH FINDINGS

This chapter provides the research findings of the dissertation. The characteristics of the study population are detailed, the four provincial case studies are described, a cross-case analysis and a documents review are presented, and finally, a summary of the aggregated statistics is given.

General Characteristics of Study Population

The following is a general description of the characteristics of the study population.

In total, there were 52 persons interviewed in the four case study provinces. Of these, 10 (19.2%) were female and 42 (80.8%) were male. There were two or three female interviewees and between eight to twelve male interviewees in each of the provinces.

Age was not considered because there is no effective birth registration system in Papua New Guinea and the people interviewed did not how old they were and often did not know the true date of their birth. For the purpose of birthday celebrations, they just pick a date they like from the calendar. It is usually the same day each year.

The mean number of years of schooling for the study population was 14.13 years of education. This usually represented high school completed at grade ten, three years of technical training, and one year of post graduate training. There was
very little difference among the provinces regarding years of schooling; Madang was
the highest at 14.43 years and Western Highlands the lowest at 13.60 years of
education.

The number of interviews in each province varied according to who was
available. Although every attempt was made to systematically interview the same
classifications of health workers in each province, it was not always possible. The
assistant secretaries for health had all the available program managers participate in
the interview process. There were 15 interviews in New Ireland, 14 in Madang, 13
in Oro, and 10 in Western Highlands.

Not all the people interviewed were originally from the province where they
were working. In New Ireland, 9 (60%) of those interviewed were from New
Ireland Province; in Madang, 7 (53.8%) were from Madang, in Oro, 5 (38.4%) were
from Oro, and in Western Highlands, only 3 (33.3%) were from Western Highlands
Province.

The professional types or categories of health workers interviewed were:
health extension officers, 21 (40.4%); nurses (sisters), 14 (26.9%); health inspectors,
10 (19.2%); dentists, 2 (3.8%); doctors, 2 (3.8%); dispenser, 1 (1.9%); public
administrator, 1 (1.9%); and radiographer, 1 (1.9%). The mean length of time each
respondent had been working in each category was 14.6 years. The health workers,
while trained in a certain occupational category often held a job or position that was
functionally slightly different.
These 8 types of trained health workers occupied a variety of 22 different positions in the study provinces. All of these positions are supervisory in nature and are considered as sectional heads or program managers at the provincial level of the health system. The mean length of time each interviewee had been working in their respective position was 6.1 years. These positions were:

- Assistant Secretary for Health
- Community Health Nursing Services Matron
- Church Health Services Coordinator
- Dispenser
- Family Planning Sister
- Health Information Officer
- Hospital Matron
- Hospital Medical Superintendent
- Hospital Secretary
- Inservice Training Coordinator
- Malaria Supervisor
- Officer-in-Charge, Water Supply
- Officer-in-Charge, Tuberculosis and Leprosy
- Provincial Health Extension Officer
- Primary Health Services Coordinator
- Provincial Dental Officer
- Provincial Disease Control Officer
• Provincial Health Inspector
• Provincial Mental Health Officer
• Provincial Nutritionist
• Special Projects Officer
• Radiographer

The mean length of time each of the interviewees had been working in their respective provinces was 10.3 years.

In summary, the study population was primarily a male group (80.8%) with an average of 14.13 years of schooling. The females were all trained as nurses and were working as nurses, matrons, family planning sisters, or nutritionists. The males were trained as dentists, doctors, health extension officers, health inspectors, a dispenser, a public administrator, and a radiographer. The total interviewees were working in a wide array of positions.

The interviewees were very experienced, averaging 14.6 years working in their respective categories and 6.1 years in their current positions. They also were very familiar with the health situation where they worked as they averaged 10.3 years of working experience in their respective provinces. The overall picture of the interviewees that emerged was that of a senior cadre of health professionals who knew their jobs and their provinces quite well.
Provincial Case Studies

Case Study 1: New Ireland Province

New Ireland was the first province to undertake the provincial health planning process in Papua New Guinea. It was selected as the first province to implement the process for several reasons. First, it was the home province of the Secretary for Health of the National Department of Health and he was keen to have his province be the first to have this opportunity to develop a five-year provincial health plan.

Second, the Assistant Secretary for Health of the New Ireland Provincial Division of Health was also very interested in helping his staff develop a provincial health plan. This Assistant Secretary was the only one of the four that was a trained physician. He was also the only one that was a Sri Lankan expatriate contract officer. All other Assistant Secretaries for Health in the provinces were Papua New Guinea nationals.

New Ireland was one of the provinces from the Islands Region of Papua New Guinea.

New Ireland was one of the provinces where the study investigator was the lead facilitator. He was accompanied by several nationals as co-facilitators of the workshops. Since this was the first province to use the newly designed training materials, there were high hopes to ensure that everything went well.

There were 15 interviewees in New Ireland: 12 males and 3 females. The average length of schooling was 14.2 years. Of the 15 interviewees, 9 (60%) were originally from New Ireland and considered it as their home province.
1. Participation/Ownership

All 15 of those interviewed participated in both of the provincial health planning workshops. Nine of the 15 (60%) participated on the provincial health planning committee that was established to coordinate and develop the plan. All 15 of the interviewees wrote at least one chapter or section of the provincial health plan. Several program managers wrote numerous chapters. In terms of participation and ownership, the process in New Ireland was very much an endeavor with wide engagement with many staff joining on the committee and every program manager getting involved in writing sections of the health plan.

2. Political Support

When asked about the level of political support given to the health planning effort in New Ireland, nine of the program managers felt there was "very much support," five felt there was "some support" and only one felt there was "very little support." The level of political support was measured by the program managers by the fact that the provincial premier and his cabinet ministers came to the opening and closing functions held after each workshop and that they gave K7,000 ($7,210 U.S.) for the printing of the provincial health plan. And after seeing how well the plan turned out, the provincial politicians were even more interested and claimed responsibility for the plan's successful completion. The provincial Premier has even used the provincial health plan as a model for the other divisions (agriculture, education, and transport) to use in developing their plans.
All of this did not happen serendipitously. The Assistant Secretary deliberately tried to get the politicians' involved from the very beginning of the process. He invited them to the workshops to give speeches. He gave monthly briefings and updates to the Premier and his cabinet to keep them interested and involved.

The strong political support given to the development of the New Ireland provincial health plan was part of a careful and strategic attempt, primarily by the Assistant Secretary for Health, to capture the politicians' attention and interest from the very beginning. The fact that they took much credit for the final product seemed immaterial to the Assistant Secretary and his program managers.

3. Provincial Health Planning Process Factors

The provincial health planning process factors included the training modules, the facilitators, the two workshops, and the technical support received before and after the workshops.

Of these listed factors, the program managers felt each was helpful to varying degrees in making the health plan. They frequently noted more than one factor. Eleven of 15 thought that "everything" or "all of them" (factors of the process) were helpful in making the provincial health plan. Five felt the "two workshops were helpful," four felt the "technical support was helpful," four felt the "modules were helpful," and three singled out the "facilitators as being helpful."
Some of the individual comments were:

All of them were helpful. They were inter-related and formed a package. They were integrated. (D.T., Dental Officer).

I think everything. It all went together. They cannot be separated. (P.B., Disease Control Officer).

Everything. They helped to give me something or some hints on how to go about it. (P.I., Church Health Services Coordinator).

Everything was helpful but especially the modules because they were well set out and we could just read through them as a guide. (T.B., Provincial Health Extension Officer).

The technical support from headquarters and the modules because I could take them home and study them in calm. (D.V., Community Health Nursing Matron).

The modules gave us a guide and the facilitators clarified things. (L.T., Provincial Nutritionist).

The workshops because I learned more skills and new skills. The skills go inside my head. I can do by myself now. (E.P., Provincial Mental Health Officer).

The workshops, the modules, and the facilitators because they gave me the thoughts of how to organize and go do something. (K.A., Hospital Matron).

The technical support like editing and screening for technical accuracy and policy conformity. (D.F., Assistant Secretary).

When asked which one of the factors was the most helpful in making the provincial health plan, the program managers sometimes noted more than one. Twelve said the modules, three said everything, and one each said the workshops, activity plans, and technical support from headquarters, respectively. They liked the
modules because they gave examples and guidelines and could always be referred to after the workshops were over.

When asked which one of the factors was the least helpful, six said "nothing, it was all helpful," three said some of the "workshop experiences," one each said "too many facilitators," "some of the forms," "the technical screening," "the training of the second workshop," "lack of information," and "insufficient participation from district health staff."

4. Most Important Reason

The interviewees described an assortment of reasons that they believed were the most important to the successful completion of the New Ireland Provincial Health Plan. They often noted more than one reason. Most of them (11 of 15) felt it was due primarily to the leadership of the Assistant Secretary for Health, Dr. F. Two felt it was due to their commitment. Two felt it was due to their frustration of not having a plan or direction. Three felt it was due to how they organized themselves and went about making the plan. One attributed the success to three previous management training courses he had attended.

The comments regarding the leadership role of Dr. F., the Assistant Secretary for Health, and his role in developing the provincial health plan are particularly cogent and indicative of his support. The following were some of the comments:

It was Dr. F. himself who motivated us. Especially in getting the sections together. His leadership role helped us to get our work done. (A.I., Primary Health Care Coordinator).
Our Assistant Secretary is very good and he helped organize us. (D.T., Dental Officer).

Because Dr. F. was always helping us. He was the main person to help us when we were stuck. (L. T., Provincial Nutritionist).

The Assistant Secretary was right behind us encouraging us all the way to 4 a.m. or 5 a.m. (K.T., Inservice Training Coordinator).

The Assistant Secretary knew what he wanted. He followed us up and chased after us to write our sections. (P.B., Disease Control Officer).

The Assistant Secretary had us working late into the night. He was on our tails to finish the plan. (D.V., Community Health Nursing Matron).

During the interview with Dr. F., he revealed that he went to the trouble to get newspaper coverage for the first and second workshops. When the plan was officially launched in January 1992, he invited the National Minister for Health and the National Secretary for Health, as well as the Premier and all his provincial cabinet members, to the ceremony. Dr. F. managed to get national television coverage for this launching event.

Commitment and pride to develop a health plan were also important. Here is an example of that feeling:

We were very serious about it. We really wanted to do it. We had our first sectional heads meeting and everybody expressed a desire to embark on doing this. We just couldn't believe it when it was printed. We saw our names and were impressed. We couldn't believe our eyes when we saw it. We completed one thing constructive for once. (D.V., Community Health Nursing Matron).
Another factor that helped the process was the current level of frustration being experienced by the program managers. Illustrative comments of this frustration included the following:

We wanted to know our assessment. We wanted a plan. We were working blindly and we wanted a direction. (P.B., Disease Control Officer).

Because we wanted to feel proud that we didn’t waste the facilitators time. We wanted to show that we could do something. We were not happy before. (K.A., Hospital Matron).

The way the provincial health managers organized themselves to make their plan was also important. Dr. F. organized a provincial health planning committee, had regular meetings, established deadlines, and checked on the progress of the plan. These meetings were held every two weeks until the plan was finished. Each program manager was given the responsibility for writing certain sections of the plan. Dr. F. helped them and followed up when they had difficulties. On several occasions, Dr. F. met with his sectional heads that were having difficulties and stayed up with them to the next morning helping them to finish their chapters of the plan.

Dr. F. gave this description of the organizational process used in New Ireland:

This is the first ever New Ireland health plan. The province had tried in 1989 to make a plan but failed. There was not enough technical support nor skills. We just didn’t know how to go about it. We just were not organized and didn’t have the
technical capacity. The previous WHO management training workshops made the whole thing easier to grasp. The skills and calculations were already covered. The planning process was a reinforcement of previous skills. The most important thing was coordination and follow-up of the health planning committee. The committee was instrumental to success. Deadlines were set and followed. Personally, I'm very satisfied that we did it properly.

5. Evaluation of the Process

All the interviewees were given the opportunity to give an overall grade or evaluation to the provincial health planning process through an open-ended question. Every respondent felt positive about the process. Some of their evaluations were "A," "very good," "very excellent," "above average," "90%," "very well done," and "very helpful." Several program managers expressed a new confidence in their own supervisory skills and knowledge as a result of the process. An example:

Because otherwise I wouldn't know how to do it. I can talk to the district people now. Something is stuck in my head now. (D.V., Community Health Nursing Matron).

6. Health Planning Skills

All the interviewees gave self-reports on how much they learned each of the specific health planning skills stressed during the process. In general they reported "very good" learning of all the skills, but they ranked a few skills higher than others. They ranked their learning of "developing activity plans" the highest, followed by "developing goals, objectives and indicators," and then "developing strategies" and "priority setting." The learning of data analysis skills and budgeting was reported as
"very much" or "some." This was not quite as high as the other skills. It is important to note that none of the program managers said they learned "very little" of any of the specific skills. All responses were either "some," or more commonly, "very much."

When asked which of these health planning skills they had carried over to use on the job, the most frequently stated skills were "all of them," "developing activity plans" and "budgeting." Less mentioned were "setting priorities," "data analysis" and "developing goals, objectives and indicators."

When asked if they thought they could develop another health plan, all 15 of the program managers said "yes" and expressed confidence in their abilities to do even better the next time. They said they had learned a lot from this experience and were looking forward to writing another one. They learned from their mistakes and were keen to continue using their health planning skills in the future. They even thought it would be easier next time and that they would not need so much help. They felt they had a model and knew how to go about it now.

7. Organizational Development

The respondents gave self-reports of how well they thought organizational development characteristics were evident in the division of health after the provincial health planning process. They also gave open-ended responses as to why this may or may not have been the case.
Most program managers felt that "teamwork" and a "participative, collaborative approach to work" were "very much" learned through the health planning process. The majority of program managers felt that the "ability to introduce planned change" and "to solve problems" had been learned only "somewhat." A variety of responses on the learning of organizational development is reflected by the following:

We learned participation and collaboration because everybody was putting together creative ideas. Everybody had to do their parts. (K.M., Malaria Supervisor).

In the past, we worked in isolation. The plan forced us to work as a team. (B.P., Health Inspector).

There are changes now, especially how to let other sections use vehicles when the need arises. (N.G., Hospital Secretary).

Everybody knows that the district staff are needed for implementation now. We want to come together now and to share our experiences. (D.F., Assistant Secretary).

Our teamwork was good. The district people worked well with us. They appreciated being involved. (A.I., Primary Health Care Coordinator).

Oh yes, we help each other now. In our sectional heads meetings, we jump in and help each other. (D.V., Community Health Nursing Matron).

We learned some understanding of our roles and responsibilities during the plan development period. (K.T., Inservice Training coordinator).
The organizational development areas of "teamwork," "participation," and "collaboration" seemed "very much" to have been "integrated into daily life." The ability to "introduce change" and "solve problems" was learned but "only somewhat."

These are difficult to do but we learned some. (P.I., Church Health Services Coordinator).

It takes doing something to learn something. It will take more time for these to develop fully. (L.T., Provincial Nutritionist).

There wasn't enough time for this aspect. We were too busy and the expectations may have been too high. (D.F., Assistant Secretary).

Some sections who used to stick to themselves are now starting to open up. (N.G., Hospital Secretary).

Because we are all different and this is a new idea to us, it will take us longer. (K.A., Hospital Matron).

8. Summary of Case Study

The case study of the provincial health planning process that occurred in New Ireland Province was unveiled during the 15 interviews. It was a process that certainly benefited by the attention given to it as the first province to undergo a nation-wide program.

The New Ireland experience was characterized by strong participation and ownership from the program managers, strong and calculated political and financial support, and strong and effective leadership from the Assistant Secretary for Health.

Helpful factors associated with the process included the training modules, the facilitators, the workshops, and the inter- and post-workshop technical support from
headquarters. Other associated and important factors in the process were the organizational ability of the Assistant Secretary and his program managers to create an effective committee, the division of the work, a strong desire and commitment to make a plan (partly resulting from frustration), and the effect of previous similar and reinforcing training activities.

Case Study 2: Madang Province

Madang was the second province to undertake the provincial health planning process and, thus, had the second longest exposure to its influences. It was selected as the second province because it had a reputation for having a stable provincial division of health and because it had successfully completed a five-year health plan in the past. It was considered to be a likely success in developing a new provincial health plan. Madang is one of the provinces in the Momase Region.

Madang was the second province in which the study investigator was the lead facilitator. He was accompanied by several nationals as co-facilitators of the workshops.

There were 14 interviewees in Madang: 12 males and 2 females. The average length of schooling was 14.4 years. Of the 14 interviewees, 7 (53.8%) were originally from Madang and considered it as their home province.

1. Participation/Ownership

All 14 of those interviewed participated in both the provincial health planning workshops. Eleven of the 14 (78.6%) participated on the provincial health planning
committee that was established to coordinate and develop the plan. All 14 of the interviewees wrote at least 1 chapter or section of the health plan. Several program managers wrote several chapters. In terms of participation and ownership, the process in Madang involved all the program managers as writers and many as committee members.

2. Political Support

When asked about the level of political support given to the health planning effort in Madang, eight of the program managers felt there was "very little" support, five felt there was "some" support, and only one felt there was "very much" support. This lack of support from the provincial politicians occurred even though the Assistant Secretary for Health invited them to the activities, which they subsequently attended. The provincial Premier promised financial support for the health plan in his speech at the closing of the second workshop. When the financial support was not forthcoming, the program managers became disappointed. Samples of their comments:

No, they didn't give us money for printing. We are one year late now. (D.B., Provincial Health Extension Officer).

Not good back ups from politicians regarding funding. (V.G., Community Health Nursing Matron).

I haven't seen any support yet. They (the politicians) just come around and blah, blah, blah to us. (D.S., Officer-in-Charge, Tuberculosis and Leprosy).
No funds for printing the health plan but there was money for buying new vehicles and overseas trips. (S.I., Provincial Health Inspector).

Part of this lack of support may have been due to the fact that the Assistant Secretary did not establish a system of giving the politicians regular updates on the progress of the health plan. He may have been reluctant to confront the politicians to remind them of their pledge of financial backing.

3. Provincial Health Planning Process Factors

The provincial health planning process factors included the training modules, the facilitators, the two workshops, and the technical support received before and after the workshops.

Of the above noted factors, the program managers felt each was helpful to different degrees. Ten of the 14 interviewees thought that "everything" was helpful in making the provincial health plan. Six felt that the "facilitators were particularly helpful" because they were able to explain and reinforce the exercises from the workshops. Four felt the "modules were helpful" mainly because they served as a take-home reference for further study. Several respondents felt the modules reinforced what they previously learned from other workshops.

When asked which one of the factors was the most helpful in making the provincial health plan, seven said the facilitators, five said the modules, five said everything, and two said the workshops.
The facilitators appeared to have been especially helpful since they were able to explain the concepts and ideas more clearly if they were not understood from the modules. One person stated that he really appreciated the way the facilitators explained everything because he had been visited by many consultants and had attended numerous workshops in the past that had confused him.

The modules were very helpful because they provided a reference that could be consulted after the workshops and when the facilitators left.

When asked which one of the factors was the least helpful, ten respondents said "nothing" noting that everything seemed to go together quite well. One felt the pace of the workshops was too fast for him to grasp the materials. Another felt the workshops were too short for him to understand everything. And one felt that he would have liked more technical support from the National Department of Health staff in Port Moresby.

4. Most Important Reason

The interviewees described a variety of reasons they felt were the "most important" to the successful completion of the Madang Provincial Health Plan. The most frequently mentioned reasons were related to the efforts of J.G., who served as the health plan coordinator for the province, the team effort of the provincial and district staff working together, and a strong desire to have a "proper" plan.

The Assistant Secretary for Health appointed J.G., the Special Projects Officer, as the Health Plan Coordinator for the province. J.G. was a recent graduate
of the University of Papua New Guinea’s Diploma in Community Health course and he was very interested in this leadership role and in getting a health plan done for the province. It was obvious that he had a personal involvement with the success of the planning effort. His efforts were recognized as very instrumental by the program managers. A sample of their comments:

Because J.G. has been organizing us and he was very committed to the plan until the politicians did not give him the money to print the plan. Then he was discouraged. (V.G., Community Health Nursing Matron).

We had a full-time coordinator (J.G.) who pushed us to write our chapters. (B.T., Provincial Dental Officer).

It was a combination of efforts by J.G. and the learning of planning by the program managers. (P.T., Provincial Nutritionist).

T.K. and J.G. were committed to the task of coordinating everything. The sectional heads worked hard on their chapters and towards their goals. (P.O., Nursing Officer).

The team effort that was used was largely the result of J.G. and the committee organizing everybody. Some comments:

The willingness and commitment of the staff to write the plan was important to us. (P.T., Provincial Nutritionist).

In Madang, the team effort was the most important for us. All program managers and district health extension officers were involved in the planning. (T.K., Health Information Officer).

The collaborative nature of getting everybody involved. This was the first time the implementors got involved. (A.D., Assistant Secretary for Health).
The desire to have a plan was also important. For example:

Here we wanted to make a plan because before, our achievements were low. We just worked when we wanted. We had no direction. We wanted to have a plan. (D.B., Provincial Health Extension Officer).

Because we think the plan is important. Everybody felt this way. Otherwise, we wouldn't know what we are doing. (S.Y., Provincial Disease Control Officer).

Because we didn't have a good plan before, so we wanted a proper plan in the province. (M.S., Malaria Supervisor).

J.G. attempted to get more involvement from the district level health workers. He personally went to each of the six districts in Madang Province and ran planning seminars on the advantages of this type of "bottom-up" planning. He not only obtained the district level input, but also explained the whole process to the district politicians. This was the first time that the district health workers had ever had the opportunity to provide input for a provincial health plan. Previous plans were written by provincial staff without consultation with the district staff. J.G. even had the Madang provincial newspaper cover his seminars in the districts.

Unfortunately, the enthusiasm of J.G. diminished when he took the first draft of the plan to the provincial politicians for financing the printing costs and such funding did not materialize. He soon became involved in other work activities. He blamed the one year delay in finishing the plan on the Assistant Secretary for Health and the Provincial Health Extension Officer for not completing their sections on time and for not pursuing the politicians for the money they promised.
Not too long after this disappointment, J.G. voluntarily sought and obtained a transfer to another province. He left the final stages of the health plan to T.K., the Health Information Officer. Further delays occurred in the printing of the plan due to lack of funds; but it was finally published in early 1993, more than 18 months behind the original schedule.

5. Evaluation of the Process

All the interviewees were given an opportunity to give an overall grade or evaluation to the provincial health planning process. Everyone felt positive about the process. Five said the process was "excellent," four said it was "very good," four said it was "good," and one said it was a "B." Other comments were that this was the first time to do this type of planning, it reinforced previous learning experiences, it consolidated things in people’s minds, it was a real eye-opener, it really helped the districts, and that things were communicated in simple, effective language.

6. Health Planning Skills

All the respondents gave self-reports on how much they learned about the specific health planning skills emphasized during the process. In general, all skills were either learned "very much" or "some." They ranked "data analysis," "preparing activity plans," and "developing goals, objectives and indicators" slightly higher than learning about "priority setting," "strategy formulation," and "developing fully-costed budgets." None of the health planning skills were reported as learned "very little."
P.L., the Provincial Inservice Training Officer, summed up his learning experience this way:

Without these workshops, I would still be lost. I thought it was only words for "big men." Now I know the words and meanings.

When asked which of these health planning skills they had carried over to use on the job, the most frequently stated ones were "all of them," "activity planning," "developing goals, objectives and indicators," and "budgeting." They reported using these newly acquired skills in making their annual plans and during supervisory visits to health centers. Several observations were made by supervisors on the ability of their subordinates to use these skills on the job:

I have seen that the district health extension officers now can make six monthly plans and can make objectives that I can understand. (A.D., Assistant Secretary).

I have seen the officers-in-charge using these planning skills in the health centers. (P.L., Inservice Training Coordinator).

When asked if they could develop another health plan, all 14 said "yes."

They further expressed a level of confidence that they could develop another plan that would be better than the current one because they had a "guideline," a "format," and "some knowledge and skills that they did not have before." It would be much easier and less trouble than before. Some even thought they could do it without as much support and more independently the next time.
7. Organizational Development

The interviewees gave self-reports of how well they thought organizational development characteristics were evident in the division of health after the provincial health planning process. They also gave open-ended responses as to why this may or may not have been the case.

In general, all the characteristics of organizational development were learned "somewhat." A few of the program managers felt that organizational development had taken place "very much" or "very little." Most felt that some degree of organizational development had occurred, although a few negative remarks were made.

"Increased teamwork" and a "more participative, collaborative style" were the most frequently mentioned organizational development occurrences. The ability to "introduce planned change" and "solve problems" was less noted.

These comments were made about teamwork, participation and collaboration:

It's too early for teamwork. We can't really tell until we start to implement the plan. (T.K., Health Information Officer).

By visiting the health centers, I can see cooperation and sharing of resources. They are doing things together now. (A.D., Assistant Secretary).

This was the first time the district health extension officers made plans with provincial sectional heads and headquarters people. (A.D., Assistant Secretary).

To a certain extent, yes. It was the first time we planned together. It was a start but we need to do it more. (B.T., Provincial Dental Officer).
Some people take it too casually. They have no will power. Some people just don't like each other. (P.O., Nursing Officer).

There was some duplication occurring before. Now we understand what each other is doing better. (M.S., Malaria Supervisor).

Not really. We still are doing things separately. People are going their own way. (S.I., Provincial Health Inspector).

Physically, on the outside, yes, but really no. (P.L., Inservice Training Coordinator).

Some respondents felt the ability to "introduce planned change" and "solve problems" were not well-achieved. They seemed to think this required a much longer period of time to develop.

Not all. Some can adjust and make changes, especially the program managers. District staff may need more training. Some problems are very difficult to solve. (S.Y., Provincial Disease Control Officer).

Some. It is not easy because there are so many levels of government. (S.I., Provincial Health Inspector).

Some people will. Others won't. Some people are frustrated that money to implement plans goes missing or wasn't allocated. (V.G., Community Health Nursing Matron).

They learned some, but it is very hard to solve problems. (P.O., Nursing Officer).

We have just stared to look at ourselves. These things will take time. (A.D., Assistant Secretary).

Probably not. They will go back to their old ways. Some people need to change their attitudes. (T.K., Health Information Officer).
We can analyze problems and situations now. We can be more reasonable now and sort things out within our means. (B.T., Provincial Dental Officer).

When we drew up the district plans we had many problems and we solved them individually, especially financial and budget problems. (B.P., Hospital Secretary).

8. Summary of Case Study

The case study of the provincial health planning process that occurred in Madang Province was revealed during the 14 interviews. It was a process that started out with great enthusiasm, waned, and then picked up again. The experience in Madang was marked by strong participation and ownership from the program managers, poor political and financial support, and the enthusiastic leadership of J.G., the Special Projects Officer, appointed as the Health Plan Coordinator.

Helpful factors associated with the process included the facilitators, the modules, and the workshops. Most helpful were the facilitators and modules, however. Other associated and important factors were the energy and commitment of J.G. and the program managers to have a plan, and the good teamwork and collaboration among the sectional heads. Of special interest was the way J.G. organized and followed up the assignments for writing each chapter and his efforts in giving seminars in the districts to gain their support and cooperation as well.

However, when political and executive support did not materialize, J.G. was discouraged and resigned. T.K., the Health Information Officer, succeeded in completing the plan more than one year later.
Case Study 3: Western Highlands Province

Western Highlands was the third province in chronological order to take part in the nation-wide provincial health planning process. The Assistant Secretary for Health was interested in having this training for his staff. He also wanted to get support to make a health plan for his province. He was a new graduate of the University of Papua New Guinea’s Diploma in Community Health course and was keenly aware of how beneficial a provincial health plan could be to more rational resource allocation. He volunteered his province for the process as soon as it could be arranged. Western Highlands is one of the provinces in the Highlands Region. The Highlands Region is recognized as being one of the most remote and least developed in Papua New Guinea.

The study investigator did not attend any of the workshops in the Western Highlands. The process was facilitated by a staff member of the United States Agency for International Development’s Child Survival Project in Papua New Guinea along with national staff members from the Department of Health.

There were ten interviewees in Western Highlands: eight males and two females. The average length of schooling was 13.6 years. Of the ten interviewees, only three (33.3%) were originally from Western Highlands and considered it as their home province. Three of the people who attended the workshops had been transferred out of the province and two others were on leave at the time of the investigator’s visit to the Western Highlands Province.
1. Participation/Ownership

All ten of those interviewed participated in both the provincial health planning workshops. Seven of ten (70%) participated on the provincial health planning committee that was established to coordinate and develop the plan. All ten of the interviewees wrote at least one chapter or component of the health plan. Several program managers wrote numerous chapters. In terms of participation and ownership, the process in Western Highlands was very participatory with wide involvement of the sectional heads in serving on the committee and in writing chapters of the health plan.

2. Political Support

When asked about the level of political support given to the health planning effort in Western Highlands, eight of ten interviewees felt there was "very little support." Only one felt there was "some support." The Assistant Secretary for Health was the only person who felt that there was "very much" political support.

In general, the program managers thought the provincial politicians were not interested in the planning process. An illustrative remark:

They were not involved. I don't think they will support us. I doubt it. We received nothing from the provincial health minister. (D.C., Officer-in-Charge, Rural Water Supply).

The Assistant Secretary for Health, however, thought the provincial politicians were supportive because they gave him K1,000 ($1,040 U.S.) to use to help the
health plan committee do their work. They also permitted him to give his staff time off so they could work full-time writing their chapters or sections.

3. Provincial Health Planning Process Factors

The provincial health planning process factors included the training modules, the facilitators, the two workshops, and the technical support received before and after the workshops.

Of these factors, most program managers felt the modules were helpful (eight of ten). Only four felt that "some of the facilitators" were helpful and only three felt the "first workshop" was helpful. It was apparent that some of the facilitators were not as helpful as they might have been and that there were problems with the second workshop. Interestingly, no interviewee thought that technical support was helpful.

Some specific comments about the facilitators were:

The modules were fine. The facilitators were a problem. No technical support was given by headquarters staff. (K.K., Assistant Secretary).

Some facilitators didn't know how to do the exercises in the workshops. (L.A., Provincial Nutritionist).

There were nine facilitators, too many. Some of them didn't do anything. They just wanted to do shopping and see the town. (P.A., Inservice Training Coordinator).

What the facilitators told us should have been the same. They were confusing us. There were too many facilitators but a few were good. (A.M., Family Planning Sister).
There was also a feeling that the National Department of Health staff did not provide enough technical support follow up to help the program managers with their chapters. This became even more critical since some of the facilitators had confused the workshop participants. Some comments which reflected this were:

We could have done better and could have completed it earlier if we had had more support from headquarters after the workshop. We needed more technical support to make the plan. (B.B., Provincial Disease Control Officer).

Somebody from headquarters was supposed to come up here to help us but they never did. (P.A., Inservice Training Coordinator).

HQ people coming to the province and sitting with us would have made a difference. I was hoping that someone from HQ would come up and go through each section/chapter with my program managers. (K.K., Assistant Secretary).

Thus, there was a general feeling that the national HQ staff had let down the provincial health managers by failing to provide adequate technical support after the workshops.

Problems which were also reported with the way the workshops were conducted:

We had confusion in the second workshop doing the budget. It was unclear and the facilitators did not know what they were talking about. Our budget was not realistic the first time. So we had to do it all over again. (K.K., Assistant Secretary).

We had problems getting the data for the first workshop so we started slow and then there was not enough time and we were rushed too fast. After the workshops, we found some of the modules and explanations were too broad. Also, not enough time was given to analyze the provincial health problems. We
could have used more time for the workshops, more small
group work, more specific exercises, and keep the expatriate
consultant here longer. We needed more technical support to
make the plan. Send the national staff back to Port Moresby.
We don't want them here again. (B.B., Provincial Disease
Control Officer).

The facilitators did not understand the second workshop. The
National Department of Health staff lost the money for the
allowances and then some of the participants ran away. (M.H.,
Provincial Health Inspector).

There were too many participants at the workshops, maybe 60–
80. Midway through the workshop when they found out that
their allowance money went missing, 50% of them dropped out.
It was chaos. (D.C., Officer-in-Charge, Rural Water Supply).

The overall coordination and conduct of the two workshops appears to have
been mismanaged. This was the first province in which the Papua New Guinean staff
of the National Department of Health were responsible for all the financial
arrangements regarding the workshops. The allowance money went missing and this
led to unhappiness of many of the workshop participants. Subsequently, many of
them left and went home. It seems that some of the workshop money was spent on
bringing too many facilitators--nine. Some of these facilitators did nothing during the
workshops but go shopping and walking around the town. The provincial sectional
heads noticed this and were upset when they saw that there was plenty of money for
the staff from Port Moresby to go to Western Highlands Province, but not enough
money for the provincial participants to have their allowances. This observed
discrepancy caused negative feelings to arise.
This was also the first time the National Department of Health staff were given the responsibility for conducting the exercises and content of the workshops. From the feedback provided by the participants, it was obvious that the HQ staff had technical weaknesses in their understanding of the modules and how to do the exercises. Complaints about their technical competencies were quite common.

The task force that developed the provincial health planning process had envisioned a rapid turnover of implementation to the Papua New Guinea staff. This was to be done to ensure more ownership for the process among the indigenous staff and to reduce the dependence on foreign experts for facilitation of the workshops. The experience from Western Highlands suggests that this process may have occurred too quickly and without the nationals becoming competent enough with the workshop materials before attempting to run the process by themselves.

When asked which one of factors was the most helpful in making the provincial health plan, eight of the ten interviewees said the "modules" and six of the ten said "some of the facilitators" or "one of the facilitators." They liked the modules because they set out a clear format to follow in developing a provincial health plan.

When asked which one of the factors was the least helpful, eight said the "facilitators" and the other two could not be specific. Again there were very critical comments about the facilitators such as: "they were confusing us" and "they did not explain things properly." A few suggested that the workshops were "too short" and that the explanations of budgeting and developing indicators were "poor."
4. Most Important Reason

The interviewees described a variety of reasons they believed were the "most important" to the successful completion of the Western Highlands Provincial Health Plan. They included "organizational reasons," "good cooperation," a "desire to have a plan," "commitment from staff," and the "support of the Assistant Secretary."

The manner in which the Assistant Secretary and the Health Planning Committee organized themselves and went about their tasks seemed to be the most critical ingredient to success. The Assistant Secretary formed a Health Planning Committee that he initially chaired. The committee had representatives from the sectional heads as well as district health officers. There was no full-time person to coordinate writing the plan, so the committee was charged with delegating chapters to be written. Deadlines were set. They met every three weeks to check on progress.

But after three months, progress stalled. Everyone was too busy with their routine work to devote much time to writing the plan. The Assistant Secretary then reformulated the committee and picked his most senior six staff to be responsible for coordinating and writing the plan. The Assistant Secretary then proceeded to obtain time off for the committee from their regular duties so they could concentrate on developing the plan. He obtained this permission from the provincial government. He also provided money for coffee, tea, and lunch for the committee. He made transportation available and gave them the exclusive use of one of the buildings. The
Assistant Secretary made the committee feel important and backed them up with the resources necessary to get the plan finished.

An account of this process by one of the committee members is provided below:

Basically, it was commitment from the staff assigned to it. And the support from the Assistant Secretary with money, transport and time off. The Assistant Secretary got the government to grant the committee members one month off to do the research and write up the plan. We had to use the water supply house everyday. We went there to do our work so we were not disturbed. We assigned certain areas to certain members. Each one did their own work. Everybody brought their work together and we discussed it. Every meeting had a different leader or chairperson. It was a rotational effort. We reviewed each chapter. We had money for coffee and cookies, even for lunch. The team members were committed. This was our first one. We are happy to have done something. (M.E., Senior Health Inspector).

5. Evaluation of the Process

When asked for their evaluation of the provincial health planning process, six interviewees said it was "good" and two said it was "very good." The remaining two said that it "could be improved." Even though there were problems with the process in the Western Highlands Province, particularly with the money and the facilitators, it was felt to have been beneficial. The process at least provided them a framework for getting started on developing a health plan, which eventually was produced.
6. Health Planning Skills

As to the degree of learning about planning skills, it is interesting to note that none of the skills were reported as having been learned "very much." Developing goals, objectives and indicators and developing action plans were reported to have been learned "somewhat." The skills learned least were reported to be "data analysis" and "priority setting." Several program managers said they would have liked to have spent more time learning these skills and wished the workshops could have been longer.

When asked which of these health planning skills they had carried over to use on the job, the most frequently mentioned skills were "developing goals, objectives and indicators," "budgeting," and "developing activity plans." This appears to be because these in fact are the skills they use everyday in their work routines.

7. Organizational Development

The interviewees gave self-reports of how well and why they thought organizational development characteristics were evident in the division of health after the provincial health planning process.

Most program managers felt "teamwork," "collaboration," "participation," and the "ability to introduce planned change" had increased "somewhat." The ability to "solve problems" was perceived as being evident only "very little."

It was generally felt that these organizational development features were hard to teach and that much more time and training were needed before people would
change their ways of doing things. Some even thought that the little positive teamwork experience gained would soon fade as people were expected to go back to their old ways.

The decentralization of health services in the Western Highlands Province was viewed by numerous respondents as having a negative impact on the organizational development of the health division. In the Western Highlands, health services have been delegated down to the district. Other provinces have only decentralized to the provincial level. Each district in the Western Highlands has a district Assistant Secretary who coordinates all sectoral activities in their respective districts. The district health workers report to this district Assistant Secretary rather than to the provincial level health program managers. This was reportedly having a negative effect on organizational development in Western Highlands Province as illustrated by these remarks of the interviewees:

The district decentralization actually worked against teamwork in the province because the districts just do their own ways and don't consult with us anymore. They get their money from the district assistant secretaries now, not the provincial level. (K.K., Assistant Secretary for Health).

Decentralization has made budgeting confusing. We did not do that part of the workshop well. We were duplicating the budget. We don’t know who has the funds: the provincial health office or the districts. (M.S., Community Health Nursing Matron).

I say decentralization to the districts has blocked problem-solving skills because they bypass us at the province and go to their district assistant secretaries for money. (A.M., Family Planning Sister).
We have no control over the district health officers because they report to the district assistant secretaries. The district health services have gone down the drain already. Next year, it will be all changed back again. We will un-decentralize back to the provincial level again. (D.C., Officer-in-Charge, Rural Water Supply).

We had good problem-solving at the provincial level but not at district level. Our programs have come to a standstill because of decentralization. We want our services back to the provincial level. We want the districts back so we can go back to supervising them properly. (M.E., Senior Health Inspector).

8. Summary of Case Study

The case study of the provincial health planning process that occurred in Western Highlands Province provided an insight into numerous aspects of the process. There were considerable difficulties experienced, several of them caused by factors of the process itself. The health team of Western Highlands succeeded in making a health plan in spite of the planning process implemented by the National Department of Health.

The Western Highlands case study was characterized by good "teamwork," "participation," and "ownership" by the program managers and the Assistant Secretary for Health. There was "little political support," there were problems with the way the workshops were managed and conducted by the facilitators, and no follow-up of technical support after the workshops by health headquarters staff. The most helpful factor associated with the process was the modules. They provided a framework for the program managers. They did not have this before and appreciated their usefulness.
Other associated and important factors in the process were the capable leadership of the Assistant Secretary who created the conditions for success, the superior organizational capacities of the program managers to get the plan completed, and a strong desire and commitment to have a plan.

This was the first province in which Papua New Guinea nationals had the major responsibility for the financial and management aspects of the workshops. From the accounts of the program managers, they did a poor job in conducting the workshops, demonstrated a lack of familiarity with the content of the modules, and seemed more concerned with travelling and shopping rather than with providing technical assistance to the province.

The provincial health managers who attended the workshops still felt the process was basically "good" because they regarded the training modules so highly. They were able to overcome the problems related to the facilitators.

**Case Study 4: Oro Province**

Oro was the fourth province to undergo the provincial health planning process in Papua New Guinea. It was selected because the Assistant Secretary for Health said that his province was ready and that they really wanted to have a health plan. This Assistant Secretary was also a recent graduate of the University of Papua New Guinea's Diploma in Community Health course. Oro was, thus, the province with the fourth longest exposure to the effects of the process. Oro is one of the provinces in the Southern Region of Papua New Guinea.
The study investigator did not facilitate any of the workshops in Oro Province. This was the very first province in which Papua New Guinea nationals were the only facilitators. No foreign consultant helped them with any of the workshops.

There were 13 interviewees in Oro: 10 males and 3 females. The average length of schooling was 14.1 years. Of the 13 interviewees, 5 (38.4%) were originally from Oro and considered it to be their home province.

1. Participation/Ownership

All 13 of those interviewed participated in both the provincial health planning workshops. Seven of the 13 (53.8%) participated on the provincial health planning committee that was established to coordinate and develop the plan. All 13 of the interviewees wrote at least 1 chapter of the health plan. Several wrote more than one. In terms of participation and ownership, the process in Oro involved every sectional head in the writing of the health plan.

2. Political Support

When asked about the level of political support given to the health planning effort in Oro, eight of the program managers felt there was "very little support," four felt there was "some" support and only one felt there was "very much" support. The Provincial Minister of Finance gave the opening address, but gave no money to pay for expenses related to developing the plan. The Provincial Deputy Secretary attended the closing ceremony. Other than that, the politicians did not attend any workshops nor were aware of the plan development. One program manager felt this
was the fault of the health managers themselves for not inviting more politicians and explaining to them how important this whole process was.

3. Provincial Health Planning Process Factors

Of the health planning process factors surveyed, eight of the program managers felt the modules and "some" facilitators were helpful. Four felt the workshops were helpful and three felt they all were helpful. There seemed to be reservations about the helpfulness of some of the facilitators.

When asked which one of the factors was the "most helpful," 10 of the 13 said it was the modules. The reasons were primarily that they "could be referred to time and time again" and because they "gave us a written reference." No other process factors were that helpful.

When asked which one of the factors was the least helpful, seven emphatically said the "facilitators" and four said that the workshops were rushed and that the time was too short. Almost everyone who attended the workshops said something negative about the facilitators or the way the workshops were conducted. The National Department of Health staff who served as the facilitators evoked quite negative remarks from the program managers. The following reflect such sentiments:

Some of the facilitators wasted our time and didn't use the data they asked us to collect. Some of them were no good and there were too many. They were rushing things. (A.B., Provincial Disease Control Officer).

The facilitators were rushing us and we didn't understand. I had to go back and look at my modules. I studied and compared so I knew what to do. R.K. (a facilitator) was
getting impatient. He wanted us to get the idea. (M.T., Hospital Matron).

At times, I could not understand what the facilitators were talking about. Time was short so they didn’t explain what we did not understand. There was no time to ask questions. (M.M., Provincial Health Inspector).

Some of the facilitators were rushing us because they wanted to go back to Port Moresby to see the South Pacific Games which were just starting. They were not sincere in helping us. There were too many tea breaks and too long lunches. We needed more detailed information. (J.F., Hospital Radiographer).

Too many facilitators confused us. We had seven different facilitators and they explained things differently. They didn’t tell us who should attend. District people and other sectors did not attend. It wasn’t organized properly. The facilitators did not understand the content of the modules and they could not explain them properly. The modules were not done in sequence. (T.P., Inservice Training Coordinator).

The facilitators were a problem. The whole thing was a bit confusing. The facilitators themselves made it confusing. It was rushed and they didn’t go through the right sequence of the modules. I remember complaining about not having enough time to absorb the materials. There were too high expectations of us in a short time. Everything was so confusing. Because the facilitators pushed us too fast, too far, too condensed in such a short period of time, I could not see from one to the other. I disliked it; without allowing us to think. It would have been better if we had had the other management training courses first. Because we didn’t grasp the workshops, that’s the reason why we dragged behind in finishing the plan. I want to do it all over again. I am not satisfied. (B.N., Family Planning Sister).

These comments suggest that there was widespread dissatisfaction with the performance of the facilitators not only in hurriedly conducting the workshops but also in their own competence in using the training technology of the modules. It
must be pointed out, however, that traditionally the autocratic, didactic style is the training norm in Papua New Guinea. Modern coaching and facilitating skills may not be completely understood nor fully appreciated in Papua New Guinea. When faced with situations in which they were not comfortable nor confident, the facilitators may have reverted to using the more familiar pedagogical approach.

4. Most Important Reason

The interviewees described a variety of reasons that they believed were the "most important" to the successful completion of the Oro Provincial Health Plan. Six thought the leadership of the Assistant Secretary and the Provincial Health Extension Officer was the "most important reason"; four felt it was the "cooperation and teamwork" of the sectional heads; two noted the frustration of not having a plan before that served as a motivating force; and one thought it was due primarily to the good participation of all program managers.

The praise of the Assistant Secretary and his Provincial Health Extension Officer as being most instrumental is shown by these very positive remarks:

Our Assistant Secretary and the Provincial Health Extension Officer were working together to coordinate everything. These two were trained at the Community Health course at the UPNG. They knew how to help us. (M.T., Community Health Nursing Services Matron).

S.P. (Assistant Secretary) kept checking on us to see how we were going with our sections. (B.N., Family Planning Sister).

S.P. (Assistant Secretary) gave us target dates and followed up on us. (M.T., Coordinator, Health Extension Services).
S.P. (Assistant Secretary) gave us time to do it and chased after us. (I.N., Hospital Secretary).

The Assistant Secretary and the Provincial Health Extension Officer were trained in community health and they knew the usefulness of the plan, so they pushed the sectional heads and followed up on them. It was too bad the Provincial Health Extension Officer died in the auto accident. (P.B., Health Extension Officer).

Because we had two people who were the masterminds behind this to chase us to finish our sections (referring to the Assistant Secretary and the Provincial Health Extension Officer). It was their leadership and everybody did their sections. They did the community health course and understood what to do. (T.P., Inservice Training Coordinator).

I would give the credit to our Assistant Secretary. I would have given up but he always checked on us. He helped me with my writing. (M.M., Provincial Health Inspector).

It is obvious that the Assistant Secretary and his Provincial Health Extension Officer exerted active, supportive leadership to their program managers. The program managers needed support to get their work done and the Assistant Secretary knew this and provided the encouragement and follow up their were seeking. It demonstrated the effectiveness of a supervisor who knew the capabilities and limitations of his staff very well and took the action necessary to help them get their work done. As a result, he had considerable admiration and respect from his staff.

Good cooperation and teamwork were also important reasons for the success as evidenced by the following comments:

Each sectional head was to write their own parts. And we sat together with our late coordinator to review the sections. The officers felt it was their plan since they wrote their sections. It
made us motivated and we contributed. We also followed our deadlines. (L.L., Coordinator, Support Services).

This was the first time to have a comprehensive health plan written by all the sectional heads. They were happy to write their sections and get feedback. (S.P., Assistant Secretary).

In the night and week-ends we worked so hard. We worked night and day! It was the first time for me and the hospital to be involved in planning. (M.T., Hospital Matron).

Everybody at least got a chance to participate. It wasn’t done behind closed doors. It was good to make the plan together. (B.K., Dispenser).

The making of the health plan also seemed to meet a strongly expressed perceived need:

Because all these years we were trying to get somewhere. We didn’t have a goal or direction. We were frustrated all the time and wanted to get somewhere. Everyone had the drive to get the plan done and wanted to do our work better. (M.T., Hospital Matron).

It was important to give us direction. We were frustrated working blindly. Because after the workshops, we felt it was very important to make a plan. (M.T., Coordinator, Health Extension Services).

There was nothing there before. We didn’t know where we were going. We were dissatisfied. We were all over the place. We felt we had to do this. I felt it was good to have a plan because I never had one before. (B.N., Family Planning Sister).

One interviewee who was very pleased to have been invited to the planning workshops noted:
In 10 years, this is the first workshop I was ever invited to and attended. So, I was happy to be able to participate in this workshop. (J.F., Hospital Radiographer).

The way the provincial health team organized themselves and went about writing the plan were also important to its ultimate success. The Assistant Secretary formed a Provincial Health Planning Committee and appointed the Provincial Health Extension Officer as the Coordinator. They both encouraged and checked on the sectional heads as they wrote their respective chapters. They also helped them with the writing when it was necessary. The committee had regular meetings and set targets for the completion of each section.

It seemed all was working well until the appointed coordinator met his untimely death. Without his steady hand, the process seemed to stall and the health plan took a long time before the first complete draft was finished. Eventually, the Assistant Secretary began to push it forward and had the second draft finalized and printed. It was significant to note that there was some frustration expressed that the plan took so long to finish. But they did finish it.

Several suggestions were made as to how the process could have been improved. The program managers were not happy that they were abandoned by headquarters staff after the workshops. Nobody came to help with their technical writing. They essentially wrote the entire plan by themselves which did not strengthen the technical support relationship between the provincial and national levels of the health system. Several suggested that the length of time allocated for
the workshops should have been longer. One interviewee suggested that a technical expert should have come from Port Moresby to stay with them for a month or so to continuously sit with the program manager to review their chapters slowly and properly. Another suggested that the district health staff should have been invited to join the workshops. And finally, there was the suggestion that they should have had the other management training courses before these planning workshops.

5. Evaluation of the Process

The interviewees gave a favorable evaluation to the overall process. Nine said it was "good," two said it was "very good," and two said it was "excellent." Some observations were that even though the process was not perfect, at least they learned something. They appreciated having learned something new and having a format and structure for future health planning activities. Several mentioned how proud they were that they finished the plan noting that they were the only division in Oro Province that had a sectoral plan. In fact, the program managers felt they could help the other divisions if they wanted to develop a plan.

6. Health Planning Skills

All the interviewees gave self-reports on how much they had learned about each of the specific health planning skills stressed during the workshop. No skills were reported being learned "very much." The planning skills learned "somewhat"
were "developing goals, objectives and indicators," "priority setting," "activity planning," and "budgeting." Data analysis skills were reported as being learned "very little."

When asked which of these health planning skills they had carried over to use on the job, the most frequently stated skills were "developing goals, objectives and indicators," "activity planning," "priority setting," and "budgeting" in that order. The reasons for this were that they could use these skills in their daily work. The skills helped them do their jobs more effectively since they were immediately transferrable in their work tasks.

When asked if they thought they could develop another health plan, all responded affirmatively and, in addition, it would be easier and better because they had learned how to do it and were more confident now. This is particularly noteworthy since they did not feel that the national facilitators really helped them at all. They basically organized themselves and taught themselves with the help of a supportive Assistant Secretary and the use of the training modules.

7. Organizational Development

The interviewees gave self-reports on how well they thought organizational development characteristics were evident in the division of health after the provincial health planning process. They also gave open-ended responses as to why this may or may not have been the case.
None of the organizational development traits were perceived as being evident "very much." "Teamwork, participation, collaboration," and the "ability to introduce planned change" into daily operations were perceived as being evident only "somewhat." Enhanced "problem-solving skills" were not perceived by any of the interviewees.

Some of the mixed responses on the presence of strengthened organizational development capacities were:

- There is more teamwork at the provincial level but not at the district level. (M.T., Community Health Services Nursing Matron).

- Not from the districts because they did not attend. Others, just somewhat. (A.B., Disease Control Officer).

- Participants lost interest and ran away during the week. They didn't learn enough. High absenteeism. But health is better than the other divisions. (D.T., Hospital Medical Superintendent).

- It was just beginning. (B.K., Dispenser).

- Maybe more teamwork now in organizing ourselves. We were isolated before. The hospital staff usually missed out. Now the hospital and the provincial health office are knowing what each other is doing. (M.T., Hospital Matron).

- I think so. But it is not easy. This was the first type of workshop like this. Before, we were working in isolation. This time we planned together. But we will need more of this type of workshop. (L.L., Coordinator, Support Services).

There was more universal feeling that improving problem-solving skills would take more time to develop:
This is hard to do. It will take time. (S.P., Assistant Secretary).

Not really. We still cannot do this. (M.M., Provincial Health Inspector).

Not very much. Maybe because they were rushing and did not emphasize how to solve problems. (A.B., Disease Control Officer).

No, still can’t do this. It takes more time and training and better facilitators. (M.T., Community Health Nursing Services Matron).

8. Summary of Case Study

The provincial health planning process in Oro Province was characterized by dedicated and effective leadership, good overall participation and teamwork, and a keen desire to have a health plan that could give meaning to and focus provincial health activities.

Helpful factors associated with the process included the modules, the Assistant Secretary and the Provincial Health Extension Officer, the organizational capabilities of the program managers, an effective division of labor, and a commitment to finish the plan.

The effort in Oro Province was especially commendable because they had to overcome the difficulties resulting from poor workshop organization and facilitation, weak political support, and the absence of technical support and follow up from the
National Department of Health. In the end, however, a health plan was completed with resulting pride and confidence in their abilities to develop an even better plan for the future.

Cross-Case Analysis

The previous section gave a detailed account of the provincial health planning process in each of the four study provinces. This section will compare the four case study provinces across the same seven dimensions in which they were described individually: 1) Participation/Ownelessness, 2) Political Support, 3) Provincial Health Planning Process Factors, 4) Most Important Reason, 5) Evaluation of the Process, 6) Health Planning Skills, and 7) Organizational Development.

Using this framework of comparative dimensions permits patterns and themes to emerge between and among the case study provinces. It aids in looking for relationships and linkages among the descriptive dimensions. Categories can be formed and recurring regularities observed. The cross-case analysis facilitates the grouping together of answers from different people into common themes (Patton, 1990). This adds depth of understanding to the examination of the provincial health planning process in Papua New Guinea.

1. Participation/Ownelessness

All four of the case study provinces completed their health plans with a high degree of participation and ownership of the process. All those interviewed had taken part in two of the planned provincial health planning workshops. Each
province had a health planning committee. Most, if not all, of the program managers served on the committee. The chairperson of the committee was usually a specific program manager delegated to the task by the Assistant Secretary.

Each study province took a similar approach in assigning each program manager the responsibility for writing their respective chapter or section. This seemed logical and rational and was the case in all instances. This did enhance the feeling of ownership for the plan and its contents. It also created a sense of pride and accomplishment in the program managers. Planning in the past had not involved the program managers, nor the hospital staff in the provinces.

The only real difference between the study provinces on the dimension of participation/ownership was the degree of involvement of the district level health workers. New Ireland and Madang Provinces invited them to the workshops and even had them write district health plans for incorporation into the provincial plan. Western Highlands attempted to involve the district staff, but when their allowance money disappeared, they became dissatisfied and dropped out. In Oro, the district staff were not even invited. This was due to the poor organization of the facilitators for this province. Figure 2 summarizes the degree of participation/ownership across the study provinces.

The pattern that emerges from all the case provinces is that of a uniformly participatory process that resulted in a strong sense of ownership by the provincial health program managers. These feelings were especially apparent in New Ireland.
and Madang because they involved the district staff in addition to the provincial program managers.

Figure 2

Components of Participation/Ownership

<table>
<thead>
<tr>
<th>Component</th>
<th>Provinces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took Part in Workshops:</td>
<td>NIP</td>
</tr>
<tr>
<td>Provincial Staff</td>
<td>x</td>
</tr>
<tr>
<td>District Staff</td>
<td>x</td>
</tr>
<tr>
<td>Health Planning Committees</td>
<td>x</td>
</tr>
<tr>
<td>Wrote Chapters:</td>
<td></td>
</tr>
<tr>
<td>Provincial Staff</td>
<td>x</td>
</tr>
<tr>
<td>District Staff</td>
<td>x</td>
</tr>
</tbody>
</table>

Legend:

NIP = New Ireland Province
WHP = Western Highlands Province
x  = Present in the Process

Note: In places where there is a blank, the component was not present.

2. Political Support

There were very real differences in the degrees of political support for the health planning process among the study provinces. This was due to a variety of reasons.
The politicians in New Ireland were invited and involved from the beginning of the first workshop. They were given monthly briefings on the progress of the plan by the Assistant Secretary for Health. They were made to feel a part of the process and allocated money for the printing of the plan. They also felt a sense of ownership and pride when the plan was completed and even sponsored a celebratory launching event. This was all part of a carefully designed strategy to capture the politicians' support from the earliest stages by the Assistant Secretary. Strong political support helped the development of the New Ireland Provincial Health Plan.

This was not the case in Madang Province. While the politicians were invited to and attended the functions of the workshops, and even promised to provide financial support, they did not live up to their promises. This had a discouraging impact on the health plan coordinator who had worked very hard, even travelling to all the districts to conduct planning seminars, and ultimately lost interest in the plan and left the province. The program managers thought the lack of political support was due to the fact that the Assistant Secretary failed to follow up with the provincial politicians to keep them interested and committed to the process. Since this did not happen, strong political support never eventuated. The Madang Provincial Health Plan was completed, albeit quite delayed, without political support, but it was a more difficult process.

In Western Highlands, there was also a general feeling that political support was inadequate. The Assistant Secretary and the facilitators did not emphasize the
importance of getting the politicians involved from the beginning of the process. As a consequence, they felt no ownership nor commitment to the plan. It was difficult for the Assistant Secretary to obtain funding from the politicians because he had not involved them earlier. The plan was finished, but it was delayed due to weak political support.

Oro Province had the weakest political support of all the case provinces. Perhaps it is more accurate to say that they had no political support at all. This was due to the fact that neither the Assistant Secretary nor the facilitators thought of inviting the politicians to join the process. It had never occurred to them that political support was important to the planning process. Whether this was merely an oversight or just poor process management was not determined.

All the study provinces completed their health plans, with or without political support. Lack of political support did not prevent any of the provinces from developing and completing their plans, but it was easier in the province (New Ireland) where there was strong political support. Political support made it easier for funds to be released for printing of the plans and for earmarking funds for eventual plan implementation. Figure 3 summarizes the degree of political support across the study provinces.
### Figure 3

Components of Political Support

<table>
<thead>
<tr>
<th>Component</th>
<th>Provinces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Invited to Workshops</td>
<td>x</td>
</tr>
<tr>
<td>2. Took Part in Workshops</td>
<td>x</td>
</tr>
<tr>
<td>3. Given Regular Briefings on Plan Development</td>
<td>x</td>
</tr>
<tr>
<td>4. Provincial Government Endorsement of Draft Plan</td>
<td>x  x  x  x  x</td>
</tr>
<tr>
<td>5. Provided Funds for Printing of Health Plan</td>
<td>x</td>
</tr>
<tr>
<td>6. Political Launching of Health Plan</td>
<td>x</td>
</tr>
<tr>
<td>7. Provided Funds for Plan Implementation</td>
<td>x</td>
</tr>
</tbody>
</table>

**Legend:**

- **NIP** = New Ireland Province
- **WHP** = Western Highlands Province
- **x** = Present in the Process

**Note:** In places where there is a blank, the component was not present.

3. **Provincial Health Planning Process Factors**

   The provincial health planning process factors specifically asked about were the training modules, the facilitators, the two workshops, and the technical support.
received before, between, and after the workshops. There was a wide variety of opinion as to which of these factors were helpful to each province in making their health plans.

In New Ireland, most of the program managers felt "all" the factors were helpful, noting that they were presented as an integrated, inter-related package of support. Most of the program managers said "everything" and specifically the modules were the "most helpful" of the factors. The program managers could not single out any of the factors as being "not helpful".

In Madang, most of the program managers felt "all" the factors were helpful. Most of the program managers said the facilitators were the "most helpful" because they could explain and clarify concepts and exercises in the workshops and modules. The program managers could not single out any of the factors as being "not helpful", noting that everything seemed to go together quite well.

In Western Highlands, the only specifically mentioned factor that was "helpful" was the modules. The modules were also singled out as the "most helpful" factor because they provided a clear format to follow and could be referred to as needed. Least helpful were the facilitators and the absence of technical support from health headquarters.

In Oro, the only specifically mentioned "helpful" factor was again the modules. The modules were also singled out as the "most helpful" factor primarily because they clarified any confusion presented by the facilitators. The program managers also felt strongly that the facilitators were the "least helpful" of the process.
factors. They emphasized the incompetent nature of the facilitators and the
difficulties they had in overcoming the confusion they caused.

Several things emerged from this comparison. The facilitators did seem to
have a direct bearing on the overall planning process in the study provinces. Where
the facilitators were viewed as competent and did a good job of managing the
workshops, the plan development went more "smoothly" as in the case of New
Ireland and Madang. Where the facilitators were less skilled and mismanaged the
workshops evident in Western Highlands and Oro, the plan development still
occurred, but it caused more frustration. The modules appeared to have been
uniformly helpful, but even more so in the provinces that experienced problems with
the facilitators. None of the factors, however, prevented any of the case provinces
from completing their plans.

4. Most Important Reason

When asked what was the "most important reason" for completing their
provincial health plan, the interviewees gave numerous reasons but there were some
notable similarities.

Most of the interviewees in New Ireland said the "most important reason" was
the leadership of the Assistant Secretary. Other reasons were how they organized
themselves to write the plan, their commitment, their desire to have a plan, and
their previous management training. They noted teamwork, cooperation, and participation as helpful factors but not at the "most important reasons" for completing their health plan.

Most of the interviewees in Madang said the "most important reason" was the leadership of the health plan coordinator, J.G. Other reasons were how they organized themselves to write the plan, the teamwork efforts of the provincial and district staff, and their desire to have a plan.

The interviewees in Western Highlands said there were several "most important reasons". These included organizational reasons, good cooperation, desire to have a plan, staff commitment, and support from the Assistant Secretary.

The interviewees in Oro also said there were several "most important reasons". These included the leadership of the Assistant Secretary, cooperation and teamwork of the sectional heads, desire to have a plan, organizational reasons, and participation from all the program managers.

Three reasons stated as being the "most important" were found in all four provinces. These reasons were leadership of the Assistant Secretary or health plan coordinator, organizational capacities, and a desire to have a plan. These could be categorized as generalizable reasons for success in making a health plan. Other common, but not consistent reasons were commitment of staff, teamwork, cooperation, and participation. Previous management training was said to have been
an "important reason" in completing the plan in only one province, i.e., in New Ireland. A summary of the "most important reasons" is shown by provinces in Figure 4.

**Figure 4**

**Most Important Reasons**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>NIP</th>
<th>Madang</th>
<th>WHP</th>
<th>Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Secretary or Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan Coordinator Leadership</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Organizational Capacity</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Desire for Plan</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Commitment of Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Training</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cooperation</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Legend:
- NIP = New Ireland Province
- WHP = Western Highlands Province
- x = Stated Reasons

Note: In places where there is a blank, the component was not present.

The provincial health planning process factors and most important reasons can be combined into a matrix showing each factor for each of the study provinces. Whether each factor was helpful or a hinderance to provincial health plan development is noted. Figure 5 shows this comparison.
Figure 5

Helpful and Hindering Factors Associated
With Provincial Health Plan Development

<table>
<thead>
<tr>
<th>Factors</th>
<th>NIP</th>
<th>Madang</th>
<th>WHP</th>
<th>Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ownership</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Political Support</td>
<td>++</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Training Modules</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Workshops</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Facilitators</td>
<td>+</td>
<td>+</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6. Technical Support</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Leadership of Assistant Secretary or Health Plan Coordinator</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>8. Organizational Reasons</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>9. Desire for a Health Plan</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>10. Teamwork/Cooperation/Participation</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>11. Staff Commitment</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Previous Management Training</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:

NIP = New Ireland Province
WHP = Western Highlands Province
++ = Very Helpful
+ = Helpful
+- = Mixed Feelings
-- = Very Hindering
- = Hindering

Note: In places where there is a blank, the component was not present.

It can be seen that New Ireland and Madang had the most helpful factors.

The major difference between these two provinces was the presence of political support and the degree of support by the Assistant Secretary. In fact, the lack of political support in Madang has been attributed to poor political follow up by the
Assistant Secretary. Western Highlands and Oro struggled through the workshops with perceived problem facilitators, but much to their credit, other helpful factors compensated for the hindering ones.

There also appears to have been some deterioration in the quality of the provincial health planning process over time. The provinces (New Ireland and Madang) that went through the process first had more helpful factors. The provinces (Western Highlands and Oro) that went through the process later had more hindering factors. One could speculate that perhaps enthusiasm and commitment by some of the facilitators and headquarters staff waned as the process wore on. Perhaps boredom set in as the process moved from province to province. Technical support staff from Headquarters may have lost interest after the intensive efforts given to the earlier provinces.

5. Evaluation of the Process

Every one of the interviewees of New Ireland said the provincial health planning process was "excellent" or "very good". In Madang, one-half the interviewees said the process was "excellent" or "very good" and the remaining half said it was "good". In Western Highlands, more than one-half the interviewees said the process was either "very good" or "good". A few said it could be improved. In Oro, more than 50 percent of the interviewees also said it was either "very good" or "good". A few said that even though they experienced disappointment and confusion,
at least they experienced the workshops and learned some things. The evaluations were more positive for the earlier provinces than the later provinces that underwent the planning process.

6. Health Planning Skills

In New Ireland, the health planning skills learned "most" were developing activity plans, developing goals, objectives and indicators, developing strategies, and priority setting in that order. In Madang, data analysis, activity plans, and developing goals, objectives and indicators were ranked highest. In Western Highlands, developing goals, objectives and indicators and developing activity plans were rated as being learned "somewhat". In Oro, developing goals, objectives and indicators, priority setting, activity planning, and budgeting were rated as being learned "somewhat". In New Ireland, the interviewees reported that they had carried over to use on the job all the skills but especially developing activity plans and budgeting. In Madang, the skills of developing goals, objectives and indicators, activity planning, and budgeting were carried over to job use. In Western Highlands, the skills carried over to the job were developing goals, objectives and indicators and activity plans while in Oro, the skills of developing goals, objectives and indicators, activity planning, priority setting, and budgeting were carried over to job use. The skills that had the most relevance and practical implementation (developing goals, objectives and indicators, activity planning, priority setting, and budgeting) in daily work routines were carried over to job use most frequently.
7. Organizational Development

In New Ireland, the interviewees reported that teamwork, participation, and collaboration were "very much" being utilized. The ability to introduce planned change and solve problems was felt to be less evident. In Madang, participation, teamwork, and collaboration were perceived as being evident only "somewhat". The abilities to introduce planned change and solve problems were perceived to be even less evident. In Western Highlands, participation, teamwork, and collaboration were perceived as being evident only "somewhat". The abilities to introduce planned change and solve problems were perceived to be even less evident. In Oro, participation, teamwork, collaboration, and the ability to introduce planned change were perceived as being evident only "somewhat." The ability to solve problems was perceived to be less evident.

Across all the provinces, increased teamwork, participation and collaboration were reported. Introducing planned change and problem-solving, however, were uniformly less evident across the provinces. From the interviews, it can be said that the organizational development aspects of introducing planned change and solving problems may take more time and training to establish in the provincial divisions of health. There could have been some misunderstanding of the organizational development questions by some of the interviewees. Some of the respondents did have difficulty understanding the organizational development questions and they had to be rephrased during the interviews.
The comparison of health planning skills and organizational development shows that more learning of these skills and components were associated with the earlier provinces which had more time since the workshops. This suggests an association between length of exposure to the process and learning of skills and organizational development. More was learned or was evident in New Ireland and Madang than in Western Highlands or Oro.

The health planning skills and organizational development aspects can be combined into a single matrix showing how well they were learned or were evident according to each province. This is summarized in Figure 6.

The cross-case analysis allowed for comparisons to be made regarding the unique health planning experience that occurred in each of the study provinces. While each case was distinct, similarities and recurring regularities did emerge. The provinces were compared across the descriptive dimensions of participation/ownership, political support, provincial health planning process factors, most important reason, evaluation of the process, health planning skills, and organizational development.

The training modules, leadership from the Assistant Secretary or Health Plan Coordinator, and a desire to have a plan were factors present in all the case provinces. Also present in all the case provinces was an effective organizational capacity in which committees were established and the work of writing the chapters
Health Planning Skills and Organizational Development Aspects

<table>
<thead>
<tr>
<th>Health Planning Skill</th>
<th>NIP</th>
<th>Madang</th>
<th>WHP</th>
<th>Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analyzing and Interpreting Health Data</td>
<td>+</td>
<td>++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Developing Goals, Objectives and Indicators</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Priority Setting</td>
<td>++</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>4. Formulating Strategies</td>
<td>++</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Preparing Activity Plans</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Preparing Budgets</td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Organizational Development Aspects:

<table>
<thead>
<tr>
<th>Organizational Development Aspects</th>
<th>NIP</th>
<th>Madang</th>
<th>WHP</th>
<th>Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Working as a Team</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Participation/Collaboration</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Ability to Introduce Planned Change</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Ability to Solve Problems</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:

NIP = New Ireland Province
WHP = Western Highlands Province
++ = Learned or Evident Very Much
+  = Learned or Evident Somewhat

Note: In places where there is a blank, the component was not present.
was divided up amongst the program managers. These committees became the coordinating bodies that saw that all the work of the health plan was followed up and completed.

8. Summary of Cross-Case Analysis

Other factors such as political support, the quality of the workshops and the facilitators, technical support from Headquarters staff, staff commitment, and degree of previous management training were not present in all the case provinces. New Ireland had the most of these additional factors present and Oro had the least present in their respective provincial health planning processes. The provinces with more of the factors present appeared to have more success in developing their plans than those provinces with fewer of the factors present.

Health planning skills and organizational development (OD) occurred in varying degrees in all of the case provinces. The highest level of health planning skills attained and the most reported organizational development occurred in New Ireland and Madang Provinces which had more positive experiences with the facilitators and additional technical support from Headquarters staff. It is possible that the previously stated problems with the facilitators experienced by Western Highlands and Oro may have been associated with the lower levels of skills learned.

Western Highlands and Oro provinces reported the lowest levels of organizational development. Perhaps the respondents did not fully understand the meaning of the OD questions, which had to be rephrased and explained. Even
though these two provinces reported the lowest levels of organizational development, their program managers certainly demonstrated superior problem-solving capabilities because they finished their health plans in spite of the flawed process.

The cross-case analysis has demonstrated that the differences between planning outcomes in the provinces were related to differences in the implementation of the process. The provincial health planning process was not conducted exactly the same way in each province. There were numerous factors that varied in degree among the study provinces. There were differences in the political and administrative environments of each province.

**Documents Review**

Numerous health planning documents and related written materials were reviewed and studied in each of the case study provinces. This was done to further illuminate the health planning process that evolved in each province. The documents were reviewed for additional insights and evidence. The types of documents reviewed included the following:

- the current provincial health plan, in draft or final form
- previous provincial health plans
- provincial annual reports or summaries of the health division
- provincial health legislation, if any
- any monitoring or evaluation documents related to the health divisions in the provinces
• any correspondence related to the health plan (letters, memorandum, and minutes)

• newspaper articles or stories related to the planning process

The review of these documents in each province follows in the order of province.

New Ireland Province

The New Ireland Division of Health had never produced a health plan before. They had earlier attempted to work on one on several occasions, but the National Department of Health failed to provide adequate technical support to the provincial health managers who did not have sufficient skills to develop a health plan. There was, however, no written evidence of these failed attempts available for review.

The New Ireland Provincial Health Plan 1992-1996 was printed and launched in January 1992. It was the first ever health plan for the province. It was a 190-page document of 30 chapters. There were 24 different chapter authors. The names of each chapter author are included in the acknowledgments. This was partly why the program managers felt so proud of their achievement.

The health plan itself is a comprehensive, thorough planning document that contains provincial objectives and detailed district level action plans for the five-year plan period. A complete situation analysis and accompanying epidemiological statistics were included. The plan was professionally printed by a printing company.
The technical contents of the plan were reviewed and amended by Headquarters staff for accuracy and policy conformity. Each chapter followed a standard format.

For this quality of a health plan to have been developed, considerable work must have gone into this endeavor. A high degree of learning and practical utilization of health planning skills were apparent in the various chapters. The plan does confirm the high degree of learning of skills as reported by the program managers.

The correspondence reviewed in New Ireland included memoranda of various types. There were memos from the health plan coordinator to the members of the health planning committee and to the sectional heads. These memos announced the dates and agenda items for forthcoming meetings. Targets dates for the completion of each chapter were also listed as a schedule in the memos. There was a memo for each month of the health plan development period. There were other memos directly from Dr. F., the Assistant Secretary for Health, to each of his program managers following up their progress on writing their individual chapters and offering help if needed. This evidence reinforces the organizational skills and competencies described in the case study narrative.

Also reviewed were copies of memos sent by Dr. F. to the minister of health. These memos were sent on a monthly basis and provided an update of the plan’s progress. The health minister took these updates to the provincial management committee (the provincial cabinet) and used them to brief the provincial Premier and other ministers. If they had any questions, Dr. F. was called in for clarification.
This corroborates the strategy of the Assistant Secretary in maintaining strong political involvement in the process from the beginning.

Newspaper clippings and articles were also reviewed. There were newspaper articles from each of the workshops. There was a two-page feature on the launching of the New Ireland Provincial Health Plan. The National Minister for Health and the National Secretary for Health were invited and their pictures were in the article. There was even a short footage of the launching on the national evening television news. Some of the program managers pinned the newspaper articles on the walls of their offices.

The documentary evidence reviewed in New Ireland confirms the provincial health planning process marked by political support, assistant secretary leadership, good organizational skills of the health planning committee, learning of health planning skills and the operationalization of these skills. The sense of pride and ownership of the provincial managers could be seen from the way they each referred to their own chapters and displayed the press articles.

The written evidence found in New Ireland indicated a managed process and corroborated the findings gained from the interviews. No incongruencies were found in the documentary evidence.

**Madang Province**

The Madang Provincial Division of Health had completed two health plans before. The first plan covered the period 1981-1985 and the second one for the
period 1986-1990. Both of these plans were available and were reviewed. These previous health plans were actually not plans at all, but more descriptive summaries of past achievements, constraints, limitations, and general desires for the future. There were no specific, measurable objectives, nor detailed strategies on how to achieve them.

The information contained in the plans was only from the provincial health office. There were no district statistics, nor district activity plans because the district health workers were not involved in developing the plans. There was no indication that there had been any community input into these early plans.

Participation in making these plans had been limited to only a handful of provincial program managers and the Assistant Secretary for Health. There was no evidence of widespread participation and involvement in these plans. Most program managers and all the district staff had been left out of the planning process.

Subsequently, the plans were not implemented, monitored, and evaluated. The plans were flawed technically because objectives were not stated in time-bound, measurable components. There were no indicators for monitoring progress of the plans. The program managers were aware of the problems with these plans. One of the chief motivating factors was their discontent with these plans and ergo, a strong desire for "a proper plan". Nonetheless, even though there were weaknesses in the content and process of these early plans, the provincial health officials did have some prior experience in completing health plans to build upon.
The Madang Provincial Health Plan that was completed after the current planning process was an improvement over previous health plans. The clarity of goals, objectives, indicators, and strategies was evident in the new plan. The general quality of the plan in terms of spelling out specific targets and measurable indicators was high. Health planning skills were learned and integrated into the new plan. It presented a much more cohesive plan of action than before.

Particularly noteworthy of the new plan was the high level of apparent participation. There were six district level action plans incorporated into the provincial plan. Each program manager had written their own chapters. Input from the provincial and district politicians was evident in their priority statements in the plan. This indicated a strong collaborative process.

The Health Plan Committee did utilize memos as a means of information sharing, following up, and monitoring progress. These were from J.G., as the Health Plan Coordinator, to other committee members and to other provincial program managers. The memos sent to the committee members advised them of meeting dates, assignments, and deadlines. The memos to other program managers were follow up inquiries as to the progress of individual sections and chapters. These showed the efforts of J.G. as the Health Plan Coordinator. The completed chapters show evidence of the good teamwork and cooperation.

There were also newspaper clippings regarding the workshops with photos of the facilitators, program managers, assistant secretary, and politicians. J.G. seemed
proud of these clippings as were the other program managers. It was very clear that J.G. had much personal involvement and commitment to the Madang Provincial Health Plan.

The written evidence found in Madang showed some previous experience in health planning. However, these efforts did not reflect participation, collaboration, and ownership throughout the province. The technical aspects of the plans were also weak. These weaknesses served as motivators for making the new health plan. The program managers wanted very much to improve on their previous efforts.

The plan that they did develop demonstrated health planning skills, teamwork, ownership, collaboration, organizational competencies, and leadership from J.G. The documentary evidence found in Madang Province corroborated the findings from the case study interviews.

**Western Highlands Province**

There were no previous health plans in the Western Highlands Province. This was the first time ever for the division of health to develop a provincial health plan. There were interest and motivation for making a health plan because they had never had one before.

Two drafts of the Western Highlands Provincial Health Plan were reviewed. The first draft was quite rough and contained numerous duplications in service delivery components between the provincial health staff and the district health staff.
There was also duplication of provincial and district health budgets. This situation could have been caused by the unique level of decentralization of health services that had occurred in Western Highlands.

By the time of the second draft, the provincial government had decided to do away with the decentralization of health services to the district level. There had been too many complaints and service delivery had deteriorated significantly. Health services were re-centralized back to the provincial level. Thus, the budget and service delivery sections of the second draft of the health plan were much improved. All the chapters contained achievable objectives and strategies. Learning of health planning skills was apparent. This second and final draft did not include specific district activity plans since services were now to be administered by the provincial health office.

The individual chapters were written by all the respective program managers. There had been an effective division of labor and good cooperation by all the provincial staff since everyone took part in writing various sections of the plan. This was seen through the memos from the health plan coordinator to the health plan committee members and to the other program managers. The memos contained assignments, target dates, and announcements. There were follow up memos as well to individual staff members who had been experiencing difficulties in writing their sections. Everything seemed quite well-organized. There was no indication that anyone had not been cooperative of the process.
An additional important document reviewed in Western Highlands was the Provincial Health Act of 1991. This was a very interesting piece of legislation because it mandated that a provincial health plan would be completed and would serve as a guide for all health activity in the province by 1992. There were specific provisions in this document that required all future health facility construction and renovations as well as new staff positions be in accordance with the Provincial Health Plan or they would not be approved by the provincial government. This may have increased the pressure and motivation of the program managers to complete their plan.

The documentary evidence of Western Highlands Province confirms the information gained from the case study interviews, i.e., that the provincial health planning process was marked by strong leadership and organizational competencies and a high degree of motivation to have a health plan. Considerable health planning skills were acquired even though the workshops had difficulties. An additional motivating factor was discovered, namely, the existence and linking provisions of the Provincial Health Act of 1991. This Act required that a provincial health plan be written and that it be used as a guide for staffing allocations, facility construction, and resource allocations.

Oro Province

There had never been a health plan in Oro Province before the health planning process. There had been several annual reports prepared by the division of health,
but never a comprehensive provincial health plan. The annual reports reviewed were simply compilations of service statistics and numbers of staff and health facilities. There were no goals, objectives, indicators, strategies nor any of the hierarchical planning components. This was truly the first ever attempt by the division of health to develop a provincial health plan.

The first draft of the Oro Health Plan was reviewed at health headquarters in Port Moresby at the request of the Assistant Secretary for Health. This first draft did not contain any district level action plans or input. The first draft was quite good and showed that learning of health planning skills had occurred with the coaching of the Assistant Secretary.

The second draft was reviewed by the study investigator in Oro during the week of the interviews. The second draft was better than the first, primarily in policy conformity with national policies. The second draft did not contain any district action plans. This could have been due to the fact that the facilitators did not inform the provincial staff about inviting the district health workers. The technical components, however, were accurate, concise, and doable.

The program managers reported that they did not learn the planning skills all that well. Perhaps they did not learn the planning skills during the workshops, but somehow they must have learned them later to have been able to produce such a plan.

The memos reviewed were the same as those of other provinces: memos from the health plan coordinator to committee members and other program managers.
informing them of meeting dates, agendas, assignments, and deadlines. Minutes of the actual meetings were not kept. It was significant to note that memos did have a motivating force on the program managers because they felt the coordinator was following up on their progress in a supportive way. All the chapters were written by different program managers so cooperation and teamwork must have been satisfactory.

There was one special letter that was written by the Assistant Secretary for Health of Oro Province to the Secretary for Health of the National Department of Health. This letter was a formal complaint about the incompetent behavior, poor facilitation, and mismanagement of the workshops by the staff of the National Department of Health who went to Oro Province. It was strongly worded and chastised those responsible for the workshops and stated that they were no longer welcome in Oro Province and could not return without formal written permission from the Assistant Secretary for Health. This letter confirms the very negative remarks given about the facilitators by the program managers during the interviews.

Oro Province also passed a Provincial Health Act in 1991. Its provisions were similar to that of Western Highlands. The creation of a provincial health plan was mandated and required as a guide for all health development in the province. The plan was to be approved by the Provincial Health Board then it became a legal provincial document. Any changes to the content of the health plan would have to go through the Provincial Executive Council (Provincial Cabinet). The requirement for
the completion of the health plan according to the provincial legislation may have also been a motivating force for the program managers.

The documentary evidence of Oro Province supports and corroborates the findings and comments obtained from the case study interviews. The process in Oro was characterized by keen participation and cooperation of all the program managers, supportive leadership from the Assistant Secretary and the health plan coordinator, and a strong desire to have a health plan. The only incongruency discovered was the reported low levels of planning skills learned and the high level of planning skills evident in the health plan that was produced by the same people.

Summary of Documents Review

A variety of documents were reviewed in each of the case study provinces. Memos, correspondence, draft and final health plans, previous health plans, provincial health acts, and legislation, as well as newspaper clippings were studied. A number of these documents were similar in each case. All the documentary evidence corroborated what was said during the interviews. They gave more meaning, more details, and a better understanding of the provincial health planning process that occurred in each study province.

The memos and correspondence showed the leadership and support of the Assistant Secretaries and Health Plan Coordinators. They also showed organizational patterns, work distribution, and follow up activities. Previous health plans revealed weaknesses in participation and technical skills. The newly developed health plans
showed more evidence of collaboration with the districts and generally displayed an improvement in technical quality over previous efforts. The existence of provincial health acts which required provincial health plans supported the findings of high motivation among the program managers.

The data from the interviews were generally validated by the documentary evidence. The documentary evidence also provided additional supportive and descriptive information regarding the unique process and its context in each study province.

Aggregated Statistics

This section presents a summary of the aggregated statistics from all the interviews. Descriptive statistics from all the case study provinces are combined to give a picture of the process as a whole. The case studies were the primary data source and the descriptive statistics were meant to be supplementary. This is the third part of the analytic methodology employed in the study design. The statistics are presented across the same seven dimensions used before. For all the statistics that follow, the study groups consisted of 52 interviewees. Since this population was small, more analytic statistics were not feasible nor desired for this study.

1. Participation/Ownership

All 52 (100%) of the interviewees took part in the provincial health planning process. There was strong involvement on the provincial health planning committees with 34 (65.4%) of the interviewees serving on the committees, 16 (30.8%) not
serving, and only 2 (3.8%) not knowing if they served on the committees or not. It appears that serving on the committees was not all that important to general participation and ownership since all 52 of the interviewees did write at least one chapter or section of their provincial health plan.

2. Political Support

Of the 52 interviewees, 12 (23.1%) said there was "very much" political support, 15 (28.8%) said there was "some", and 25 (48.1%) said there was "very little". This indicates that overall, about one-half of the program managers felt there was inadequate political support for the provincial health planning process. The individual case studies showed that this general finding was not generalizable and that New Ireland was an exception with very strong political support.

3. Provincial Health Planning Process Factors

When the program managers were asked which of the provincial health planning process factors were helpful, a total of 83 responses were obtained. The breakdown of these responses is shown in Table 1.
Table 1

Helpful Provincial Health Planning Process Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Modules</td>
<td>24</td>
<td>28.9</td>
</tr>
<tr>
<td>Workshops</td>
<td>12</td>
<td>14.5</td>
</tr>
<tr>
<td>Facilitators</td>
<td>19</td>
<td>22.9</td>
</tr>
<tr>
<td>Technical Support</td>
<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>Everything (all of them)</td>
<td>24</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

These results indicate that most of the factors were considered helpful except that technical support from health headquarters was not particularly helpful. This was due to the fact that technical support was not provided to any of the provinces, except New Ireland.

When the interviewees were asked which were the "most helpful factors" of the process, the most frequently listed factors were the modules (50%), the facilitators (30.8%), and everything (all of them) (15.4%). These are shown in Table 2.
Table 2

Most Helpful Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modules</td>
<td>26</td>
<td>50.0</td>
</tr>
<tr>
<td>Workshops</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Facilitators</td>
<td>16</td>
<td>30.8</td>
</tr>
<tr>
<td>Technical Support</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Everything (all of them)</td>
<td>8</td>
<td>15.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>52</td>
<td>100.0</td>
</tr>
</tbody>
</table>

When asked which of the factors were the "least helpful" in making the provincial health plan, only 38 responses were received and 14 did not cite anything as being least helpful. These are shown in Table 3 in which the facilitators were the least helpful followed by the workshops. The nearly 40 percent who felt that nothing was not helpful in essence were saying that everything was helpful.

Table 3

Least Helpful Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modules</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Workshops</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td>Facilitators</td>
<td>17</td>
<td>44.7</td>
</tr>
<tr>
<td>Technical Support</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Nothing (none of them)</td>
<td>15</td>
<td>39.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4. Most Important Reason

When asked what was the most important reason for the success of their province to complete their health plan, the interviewees gave 75 responses. Many gave more than one most important reason. Table 4 shows the results.

Table 4

<table>
<thead>
<tr>
<th>Reasons</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Secretary or Health Plan Coordinator Leadership</td>
<td>28</td>
<td>37.3</td>
</tr>
<tr>
<td>Organizational Capacity</td>
<td>9</td>
<td>12.0</td>
</tr>
<tr>
<td>Desire for a Plan</td>
<td>12</td>
<td>16.0</td>
</tr>
<tr>
<td>Commitment of Staff</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td>Previous Training</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Teamwork</td>
<td>8</td>
<td>10.7</td>
</tr>
<tr>
<td>Cooperation</td>
<td>8</td>
<td>10.7</td>
</tr>
<tr>
<td>Participation</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

These numbers indicate that the leadership of the Assistant Secretary or the Health Plan Coordinator was the most important reason for more than 37 percent of the responses. The desire for a plan was second with 16 percent and organizational
capacity was third with 12 percent. These numbers support the interview information which showed the common reasons across all study provinces to be leadership, organizational capacity, and desire for a plan.

5. Evaluation of the Process

All 52 of the interviewees were able to give an evaluation, assessment, or rating for the provincial health planning process. A summary of these is listed in Table 5.

Table 5 shows an overall very high evaluation for the provincial health planning process. More than 92 percent of all interviewees rated the process as either excellent, very good, or good. Even though there were problems in several of the provinces, the program managers did not fault the process as a whole. The process was still perceived as positive and helpful to them in spite of the difficulties.

Table 5

Evaluation of the Process

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>15</td>
<td>28.8</td>
</tr>
<tr>
<td>Very Good</td>
<td>17</td>
<td>32.7</td>
</tr>
<tr>
<td>Good</td>
<td>16</td>
<td>30.8</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>5.8</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>52</td>
<td>100.0</td>
</tr>
</tbody>
</table>

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6. **Health Planning Skills**

Table 6 provides the degree of learning by specific planning skills. The data indicate that the health planning skills of activity planning and developing goals, objectives and indicators were learned more than the other skills. The skills learned the least appeared to have been analyzing and interpreting health data, priority setting, and formulating strategies and budgeting. However, the variances between the categories were not that significant.

<table>
<thead>
<tr>
<th>Planning</th>
<th>Degree of Learning</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Much</td>
<td>Some</td>
</tr>
<tr>
<td>1. Analyzing and Interpreting Health Data</td>
<td>13 (25.0)</td>
<td>26 (50.0)</td>
</tr>
<tr>
<td>2. Developing Goals, Objectives, and Indicators</td>
<td>21 (40.4)</td>
<td>28 (53.8)</td>
</tr>
<tr>
<td>3. Priority Setting</td>
<td>17 (32.7)</td>
<td>26 (50.0)</td>
</tr>
<tr>
<td>4. Formulating Strategies</td>
<td>16 (30.8)</td>
<td>27 (51.9)</td>
</tr>
<tr>
<td>5. Activity Planning</td>
<td>24 (46.2)</td>
<td>24 (46.2)</td>
</tr>
<tr>
<td>6. Budgeting</td>
<td>14 (26.9)</td>
<td>31 (59.6)</td>
</tr>
</tbody>
</table>
7. Organizational Development

All 52 of the interviewees were able to give responses regarding the presence of organizational development aspects in the provincial divisions of health after the provincial health planning process. Their responses are summarized in Table 7.

This table shows that the organizational development aspects of working together as a team and using a more participative, collaborative approach were more evident after the provincial health process than the abilities to introduce planned change or solve problems. This information appears to be congruent with the comments made by many of the interviewees that teamwork and a participative, collaborative approach were easier to develop. The abilities to introduce planned change and solve problems were perceived by the program managers as requiring more time and training to develop.

Table 7
Organizational Development Aspects

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Degree of Learning</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Much</td>
<td>Some</td>
</tr>
<tr>
<td>1. Work Together as a Team</td>
<td>12 (23.1)</td>
<td>29 (55.8)</td>
</tr>
<tr>
<td>2. Participative, Collaborative Approach</td>
<td>11 (21.2)</td>
<td>30 (57.7)</td>
</tr>
<tr>
<td>3. Introduce Planned Change</td>
<td>5 (9.6)</td>
<td>39 (75.0)</td>
</tr>
<tr>
<td>4. Solve Problems</td>
<td>5 (9.6)</td>
<td>25 (48.1)</td>
</tr>
</tbody>
</table>
8. Summary of Aggregated Statistics

The section on aggregated statistics was meant to provide additional data to better understand the complexities of the provincial health planning process. These data, when integrated with the interview data, provide a more complete picture of the process that occurred in the study provinces.

The statistics showed a high degree of participation/ownership for the process among the four provinces and supported the findings from the interviews.

The statistics showed an overall inadequate level of political support for the process. This was not the same across all the provinces, however, as New Ireland was characterized by a high degree of political support. This distinction could not have been gleaned from the statistics alone.

The statistics pointed out that helpful process factors were the modules and the facilitators. The training modules were generally helpful to all the provinces but there were very different provincial experiences with the facilitators. The interviews showed that New Ireland and Madang had much more positive experiences with their facilitators than Western Highlands or Oro. The interview data pinpointed which provinces had more helpful or less helpful facilitators. When data from all the provinces were aggregated, however, these differences were not discernible.

The statistics on most important reasons corroborated the information from the individual provinces. Both showed Assistant Secretary or Health Plan Coordinator leadership, desire for a plan, organizational capacities, and teamwork/ cooperation as the most important reasons.
The statistics on the evaluation or assessment of the process given by the interviewees showed an overall very positive rating. It could not, however, distinguish the marked differences in rankings among the individual provinces.

The statistics on the learning of health planning skills corroborated the findings of the provincial interviews. The skills learned the most were activity planning and developing goals, objectives, and indicators.

The statistics on organizational development also corroborated the general findings of the provincial interviews. However, they could not indicate which specific provinces had the least organizational development.
CHAPTER 5
SUMMARIES OF STUDY PROVINCES, DISCUSSION, AND CONCLUSIONS

Summaries of Study Provinces

New Ireland Province

The provincial health planning process that occurred in New Ireland Province was marked by effective leadership from the Assistant Secretary, strong political support, wide participation and involvement of program managers and district health workers, a keen desire to have a plan, and good organizational competencies of health staff. The process was aided by being the first province to undergo the process and extreme care was taken by the facilitators to ensure its success. In many ways, it was a showcase province and there was considerable pressure to demonstrate that the process was a success. This province may have had more special attention that the others simply because it was the first province and the home province of the Secretary for Health of the National Department of Health.

The level of health planning skills and organizational development that occurred in New Ireland were reported as being very high, higher than any of the other provinces. Again, this appears to have been due to the extra care taken by the facilitators, the Assistant Secretary for Health, and the level of commitment and involvement of the provincial and district health managers.

The documents reviewed corroborated the information gleaned from the interviews. They showed even more detail as to how the process evolved. The communication of the Assistant Secretary to his program managers showed concern
and supportive follow up for the completion of the sections of the plan. The correspondence from the Assistant Secretary to the provincial politicians showed a strategy of keeping them involved and committed to the planning process. Newspaper clippings reinforced the political support and the pride of the program managers in the process. And finally, the health plan itself was of a high quality, well-written, clear, and displaying the authors names for each chapter.

The provincial health planning process in New Ireland Province was certainly successful. It had the most supportive or facilitative factors of all the study provinces.

**Madang Province**

Madang was expected to succeed in the provincial health planning process because it had completed health plans before (albeit not of a high quality) and exemplified a very stable and senior staff in the provincial health office.

The process in Madang went through very distinct phases. There was a general euphoria during the workshops and everyone was highly positive and committed, including the provincial politicians. The Health Plan Coordinator took on the responsibility for completing the plan with enormous enthusiasm. He duplicated the provincial level workshops in all six districts amidst much media coverage. The program managers and district health staff were all very deeply involved in writing the chapters of the plan. Everything went very smoothly and the draft health plan was completed as scheduled. However, when the draft plan was presented to the
Assistant Secretary for Health for funding of the printing (as promised by the provincial politicians), the money was not available. The Health Plan Coordinator became so discouraged and disillusioned that he left Madang for a job in another province. After some time, the Assistant Secretary began to show more interest and appointed the Health Information Officer as the new Health Plan Coordinator. The new coordinator organized the efforts and with the help of the Assistant Secretary, lobbied the politicians for the additional funding. The plan was completed, but it was late.

The process in Madang showed extensive participation, involvement, and commitment from the Provincial and District Health Managers. There was a keen desire for a plan and there were organizational competencies among the program managers.

The provincial health planning process in Madang Province was successful in that a health plan was completed and health planning skills were learned. Organizational development occurred to some degree in the province after the workshops. It was not a well-coordinated process and perhaps skills were not learned as much as in New Ireland but it can still be called a success. It did point out the importance of having political support for the process and that without it, the plan could still be completed, but it was just more difficult.

The documents review of Madang supported the findings of the interviews. While there were provincial health plans in existence, they were not objective-based. They were more annual summaries or reports which did not spell out specific
strategies and targets. This confirmed the statements from the program managers that they wanted a "proper health plan" that gave guidance to activities. There were written correspondence by the Health Plan Coordinator to the program managers regarding meetings and the sections of the plan. The plan that was completed did show a keen involvement of the entire provincial and district health staff. It was very well-written, thus supporting the high level of health planning skills learned.

**Western Highlands Province**

The provincial health planning process that took place in the Western Highlands was considerably more difficult and tedious than either New Ireland or Madang. The process was affected by poor organization and management by national facilitators. There were problems with the handling of the allowances for participants and in the conduct of the workshops by the facilitators. The problems were compounded by excessive numbers of facilitators whose competency was questionable in relation to their knowledge about the modules, exercises, and processes in teaching. Political support was also lacking.

In spite of the problems encountered, a supportive assistant secretary, a strong health planning committee, and committed program managers with a desire for a health plan were important factors that aided in the successful completion of the health plan. The Assistant Secretary was particularly supportive of his staff as he created the special conditions for his team that permitted them to get the plan finished without being overly distracted by their routine duties.
The plan that was eventually produced was very good. It showed wide participation and collaboration of the provincial program managers. There were no district level action plans included because of the current controversy regarding the recentralization of services away from the districts and back to the provincial health office. The completion of the Western Highlands Provincial Health Plan was a very important milestone in health history of the province and certainly one the province could be proud of.

The documents reviewed generally confirmed the superior organizational capacities of the program managers and the Assistant Secretary. The completed health plan supported health planning skills learned. The Provincial Health Act provided another motivating factor for the completion of the plan.

There was a discrepancy between the high quality of the health plan produced and the rather low level of health planning skills reported during the interviews. On the other hand, it would seem logical that skills were learned to a high degree, reflected in the completion of such a health plan.

Another discrepancy was the report by the provincial managers that a low level of organizational development events occurred particularly problem-solving capacities. Yet they were very effective in organizing themselves and solving the problems left behind by the facilitators. They could not have completed their health plan without superior teamwork, collaboration, and problem-solving skills. As in Madang Province, questions related to OD were not clear to the interviewees.
Oro Province

Oro Province also had a troublesome experience with the provincial health planning process. It was marked by many problems, but the program managers overcame the obstacles and completed their health plan.

The process in Oro was characterized by poor political support and incompetent facilitators. There was widespread unhappiness with the performance of the facilitators. The workshops were conducted in an unsatisfactory manner which resulted in a formal complaint being written to the Secretary for Health. The districts were not invited to the workshops so participation of all health managers was limited.

Troublesome as these problems were, they were not insurmountable. Positive factors overcoming these problems included an Assistant Secretary who provided coaching and encouragement, a well-organized health plan committee, commitment, and good teamwork from the program managers. Even when the Health Plan Coordinator died, the program managers re-grouped, re-dedicated themselves, and finished their plan.

The plan that was produced showed a high degree of health planning skills. But the program managers did not report learning the skills all that well. Perhaps they learned the skills on their own after the workshops, as was the case in the Western Highlands.

Organizational development was also reported to be very limited. This appeared to be incongruent in view of the exceptional problem-solving capacities and teamwork evidenced by program managers in completing their plan. Such
inconsistencies may have been due to misunderstanding of the organizational development questions or the lack of understanding of linking organizational development characteristics with what they actually were doing.

Nonetheless, the provincial health planning process was successful in Oro because they did complete the plan, learned health planning skills, and demonstrated enhanced organizational development capacities. The completion of the first ever Oro Provincial Health Plan was a benchmark in the province.

The documents reviewed reflected most of the findings gained from the interviews. The drafts of the health plan were reviewed in detail and showed competent health planning skills. The memos and letters confirmed a supportive Assistant Secretary who encouraged and followed up with his staff. The Provincial Health Act provided additional motivation for the program managers to complete the plan.

Discussion

This dissertation reports on a study of the development of provincial health planning in Papua New Guinea. The general purpose of the study was to examine the provincial health planning process utilized in Papua New Guinea and to assess or evaluate its relative success in achieving its objectives. It specifically examined the process as well as the factors involved in developing five-year provincial health plans.

This discussion section will address each of the research questions of the study.
1) What factors were associated with the success or failure of the provincial health planning process in assisting the provinces to make five-year health plans?

The factors that were associated with the success of the provincial health planning process in assisting the provinces to make five-year health plans included the following:

- broad and meaningful participation of provincial and district health workers in the workshops and on the provincial health planning committees
- a sense of ownership of the health plans that developed through program managers (and some district health officers) being responsible for the writing of individual chapters or sections of the health plan
- strong support and involvement from the provincial politicians
- the five provincial health planning training modules
- certain facilitators for the workshops
- the workshops, depending on who the facilitators were
- the technical support in reviewing the draft health plans from National Health Department staff (when it was provided)
- the supportive leadership of the Provincial Assistant Secretary for Health or the Provincial Health Plan Coordinator
• the high degree of organizational capacity within the provinces to form
effective work teams and the division of labor to write the plan
• an expressed, strong desire for a health plan (often the result of prior
frustration from the effects of not having a plan before, not having a plan
of high quality, or not having been involved in the writing of any
previous plan)
• commitment of provincial and district health staff to the development of a
health plan
• previous planning and management training was related to success in
those provinces where it had occurred
• teamwork and cooperation of all health staff in working together to write
the plans

Not all of these factors were equally associated with success in the making of
health plans in all the provinces. The presence of these factors differed in degree and
quality across the four study provinces. However, they were all in some way
associated with successful efforts in developing provincial health plans.

Even though all four study provinces managed to finish their health plans in
either final or draft forms, some factors certainly had a negative influence on the
process. None of the factors prohibited plans from being completed but some of
them did delay the process in certain instances. There were no failure factors per se,
but there were impeding factors. The lack of political support and technical support
from health headquarters were apparent impeding factors. Some of the facilitators and the manner in which they conducted the workshops had a very negative influence in some of the provinces. In one province, the lack of active support from the Assistant Secretary slowed the planning process. Much to the credit of all the provincial health managers, they overcame all these impeding factors and completed their health plans, albeit some sooner than others.

2) **What factors contributed to the success or failure of the provincial health planning process to build health planning skills in the provincial health workers?**

The most important factor in building learning skills was the facilitators. Where the provincial health staff reported that the facilitators were helpful, the learning of health planning skills was reported to be higher. Where the provincial health staff had problems with the facilitators, the learning of health planning skills was lower.

The training modules were also a positive factor in the learning of health planning skills. They often served as a reference for the program managers to study after the workshops or for clarification when the facilitators had been particularly confusing. The value and usefulness of the planning modules were stressed in all of the study provinces.

A factor associated with the learning of health planning skills was the supportive leadership of the Assistant Secretary or Health Plan Coordinator. In those
provinces where there was this kind of support, the learning was effective as evidenced by the quality of the health plans produced. This factor was particularly important in the provinces where the facilitators did not do a good job. In those instances, the Assistant Secretary or the Health Plan Coordinator would consult with his staff and reinforce or clarify the planning concepts and review each chapter or section of the plan with its writer. This type of hands-on coaching helped the learning of skills and was appreciated by the sectional heads.

Another factor related to learning of health planning skills was the relevance of the skills to actual on-the-job duties. The skills learned the best were those that were most relevant and transferable to immediate on-the-job use. The skills learned the least were those that the program managers did not utilize in their daily work routines. The immediate applicability of health planning skills into regular job duties was very important in how well the skills were learned.

The desire to learn was also associated with the higher learning of health planning skills. In all the study provinces, there was a keen desire to have and make a health plan. The program managers wanted to learn and were determined to make a plan. The completion of their respective plans is testimony to the requisite skills learned.

The way the workshops were designed was also a factor in the successful learning of health planning skills. The workshops maximized small group discussion, interaction, and joint problem-solving. They were based on the concept of social learning theory in that the participants were expected to learn from each other in the
group process. The workshops emphasized the working together of small groups of program managers and district health officials.

The approach used also appeared to have been a factor in the successful learning of skills in the provincial health planning process. The developmental approach used incorporated active learning and maximum participation. The adult learning principles of using real data and information, contextual relevancy to job tasks, specific problems to solve, immediate feedback, and incremental learning were incorporated into this approach. The successful learning of health planning skills were associated with this developmental approach. The developmental approach and the provincial health planning process were interwoven.

3) What factors contributed to the success or failure of the provincial health planning process to enhance the problem-solving capacities (organizational development) of the provincial divisions of health?

The organizational development aspects of working together as a team and using a more participative, collaborative approach were considerably more evident after the provincial health planning process than the abilities to introduce planned change or solve problems. The abilities to introduce planned change and to solve problems were reported as being more difficult and requiring more time and training to develop. The earlier provinces in the process reported greater organizational
development occurring than the later ones suggesting variations in the delivery of the process across provinces.

A major factor that was related to organizational development was the skill of the facilitators in conducting the workshops. It seems to have been related almost to the style or personality of the facilitators. Some just were not capable nor comfortable in supportive, coaching type roles. Again, the earlier provinces appear to have fared better than the later ones with respect to the facilitators. Group process and facilitation skills are perhaps not all that well-developed in Papua New Guinea. The nationals who served as facilitators may not have fully understood the finer nuances and qualities needed for successful facilitation. There could be numerous reasons for this such as the colonial history of didactic education, the reliance on traditional teaching methods, and the lack of experience in any alternative ways of designing learning environments.

The Assistant Secretaries and the Health Plan Coordinators did, however, show very sensitive and perceptive understanding of the needs and weaknesses of their program managers. They adopted a caring and coaching attitude that provided technical guidance and follow up that aided the program managers in completing their sections of the health plans. These provincial health leaders seemed much more attuned to the needs of their staff than the facilitators from the National Department of Health. This could, in part, explain the impact and influence of provincial health leaders on successful organizational development in their provinces.
The inherent organizational capacities of the provincial health managers themselves supported enhanced teamwork and a more participative, collaborative approach. The workshops just happened to tap into and expand an existing and perhaps underutilized strength.

The design of the provincial health planning process was meant to have an organizational development impact. It was planned that the process would initiate some carry over effects in enhancing the organizational effectiveness of the provincial divisions of health. Participative planning had not been the norm in Papua New Guinea and the provincial health planning process was geared towards introducing this new style of planning. The process adopted the developmental approach and was found to be a positive factor in initiating organizational development (OD) in the study provinces. On the other hand, the process may not have contributed as much to the development of the OD concepts as originally intended. Perhaps, the transfer of organizational development skills and attitudes was overly optimistic by the provincial health planning task force.

It needs to be pointed out that several of the program managers did not seem to completely understand the interview questions regarding organizational development. Although it is not known exactly why this was so, the concept may have been difficult to grasp, representing an idea that was complex and abstract. At any rate, there were some inconsistencies in the reported levels of organizational development and what the program managers actually accomplished while making their health plans. The way the program managers organized themselves, divided the
labor and tasks, and got the plans written showed a remarkable degree of effective organizational development, yet they did not report this as such.

4) Which factors were unique to transferring this health planning technology in Papua New Guinea and which are most likely to have merit in transferability to other situations and countries?

The factors that were unique in transferring this health planning technology in Papua New Guinea were related to the overall approach employed. This developmental or learning process approach emphasized practical inservice training in a highly participative mode. Active involvement of all the provincial health managers in small working groups was an intended hallmark of this process. The health managers were supported by facilitators to analyze their own problems and to develop relevant solutions in a flexible, non-prescriptive manner. The approach used initiated a process whereby collaboration in problem-solving and planning would be introduced and hopefully carried on by the provincial health staff after the workshops. While the making of provincial health plans was important, it was intended that a more collaborative planning process would be instituted even if plans were not completed.

Other factors unique to transferring this planning technology in Papua New Guinea were the readiness or receptivity of the provinces, the inherent organizational competencies of the health managers, and the supportive efforts of the Assistant Secretary or Health Plan Coordinator. The health planning process was successful largely due to the existence of these factors in the provinces. These factors as well
as the process factors of the developmental approach combined to give synergistically positive results.

The conducive receptivity factors found in Papua New Guinea may not necessarily be found in other situations and countries. However, they are critically important if transfer of this type of technology is attempted. A comprehensive assessment of these readiness factors prior to any such training program is vital to its success. If the readiness factors are not present, any effort to embark on technology transfer should be carefully considered. As an alternative, efforts should be concentrated on enhancing and creating these conducive factors before any transfer program is attempted.

On the other hand, the developmental or learning process approach to technology transfer may be transferable. The characteristics of this approach have worked well in Papua New Guinea. However, this could have been due to situational readiness factors. The developmental process factors and the readiness factors merged in Papua New Guinea to produce successful results. Without both types of factors present in a particular situation or country, it would seem that an attempt at technology transfer might have less than optimal results. As such, the focus should be on integrating the two categories of factors when contemplating the introduction of any new technology.
Conclusions

This dissertation study was about the provincial health planning process in Papua New Guinea. It can be thought of as an effort in transferring Western planning technology in a Third World country via the developmental or learning process approach. This occurred in an environment of decentralized health services.

The provincial health planning process in Papua New Guinea had three main objectives: 1) help the provinces develop five-year health plans, 2) build skills in health planning at the provincial and district levels, and 3) enhance the organizational development capacities of the provincial divisions of health. The case study methodology was utilized to assess and evaluate how well these objectives were met and to discern what factors were associated with its relative success or failure.

The decentralization of health services in Papua New Guinea required managerial competencies being in place at the lower levels of the health system where the services were to be delivered. The health planning skills needed to manage provincial health services were weak, but the degree of weakness was not fully realized until after decentralization took place. The importance of having a cadre of well-trained rural health services managers in place to run provincial health services was not fully appreciated during the euphoria of provincial self-rule and autonomy brought about by decentralization. Training in management and planning was not thought of as corollary to decentralization. The need became evident soon after decentralization. The provincial health planning process can be thought of as an
effort to enhance the capabilities of the rural health service managers to more effectively deliver health services.

The painful lessons of deteriorating health services and confusion in managing those services are seen by the case study of the Western Highlands Province. This province decentralized beyond the provincial level to the district level in which health services were managed by non-health qualified district assistant secretaries. This resulted in poor financial management, confused technical and reporting relationships, and a feeling that services were not being delivered as well as before. Subsequently, the provincial government has recentralized health services back to the provincial level. This was surely a case of decentralizing far beyond the management capacities of those concerned.

While the provincial health planning process was having success in building health planning skills for the rural health managers, the entire decentralized provincial government system was failing. This study has shown that while such a process could succeed in its objectives, it was still surrounded by a much larger political and governmental environment that it could not control. Future programs of a similar nature need to take into consideration the all-encompassing external environment and factors or the gains could become isolated and ultimately negated.

The principles and concepts of the developmental or learning process approach appear to have been positively associated with completed health plans, skill-building and organizational development. The provincial health planning process was
designed according to this approach to development and it showed evidence of working well in Papua New Guinea.

Where the process stalled, it may have been due to the leadership being thrusted upon the Papua New Guinean staff too soon. A slower, more gradual transfer of responsibility for the process may have been more appropriate considering the cultural and education backgrounds of the national staff.

The value and benefits of the developmental or learning process approach were demonstrated by the success of the provincial health planning process in Papua New Guinea. The transfer of "software" (i.e., training) type of technology may be much more suited for this type of approach.

While considerable advances were made in building health planning skills at the provincial level, it appears that organizational development was a much more difficult concept to implement and measure. There were some gains in the dimensions of teamwork and collaboration during the process. These were significant especially since prior to this project, participatory planning and involvement of all key staff in the planning process were relatively unheard of in Papua New Guinea. As such, further efforts to conceptualize, measure, and analyze the effectiveness of OD interventions, particularly in developing countries is certainly advocated.

This study combined two major aspects of evaluation research. It was summative in that it looked at the overall success of the provincial health planning process in achieving its pre-stated objectives. And it was formative in that the findings of the study have already been used by the National Department of Health to
refocus the process to emphasize more political support and encourage more district involvement. Refresher training has been held for the national staff in the skills of facilitation as well as reviewing the exercises contained in the modules.

As a major aspect of public health practice, the provincial health planning process showed how valuable the qualitative aspects of evaluation can be. Rich insights into the conditions that fostered success in each province were discovered. The unique factors that aided the successful transfer of health planning skills were obtained from the in-depth interviews. Distinctions and differential effects of the process were revealed through the use of qualitative methodology.

The value of qualitative interviews in cross-cultural research also was supported by this study. During the interviews, questions and ideas could be explained and clarified immediately and in person. The actual nuances of meaning and feelings were captured as the study investigator personally conducted each interview.

The case study method with emphasis on qualitative measures was the most appropriate research method to use. It has been said the each research study must be adapted to the particular conditions and phenomenon under investigation. Each research design is unique. The methods chosen for the study of the provincial health planning process in Papua New Guinea were appropriate and provided the "thick" descriptive analysis that was intended.

This study uncovered factors that were associated with the successes of the provincial health planning process. Some of these factors were a deliberate part of
the process and others just emerged from the findings. The importance of the
modules and the role of the facilitators have already been elaborated upon. The
factors that emerged and were the most critical to the success of the process in each
province were:

- the leadership of the Assistant Secretary or Health Plan Coordinator
- a strong desire and commitment for a health plan
- superior organizational capacities of the program managers, and
- a sense of teamwork/cooperation/participation of the program managers.

These four factors were essential to success and they were present in each of
the provinces. Other helpful but not critical factors were political support and
previous management training. These were not present in all provinces.

Before the study, it was not known that there were factors other than those
inherent in the process that would have such an important bearing on the outcome of
the provincial health planning process. These critical factors should be assessed and
strengthened before similar planning processes are undertaken. In this way, the
beneficial factors of the developmental approach can be maximized when combined
with these critical precondition type factors.

It was noted that the provincial health planning process did have some general
waning of enthusiasm as it progressed over time. Outcomes from the earlier
provinces were better than those of the later provinces, possibly due to fewer
problems. This could have been due to the wearing off of the sense of novelty, the
general decrease in motivation of responsible staff, and the transition from a special, pilot type of program into a repetitious, nationwide program. Whatever the precise reason, it is worth noting and preparing for in any similar type of process.

Even though this study has demonstrated that certain factors are associated with successful provincial health planning processes adapted in Papua New Guinea, more studies of a similar nature are warranted, particularly in decentralized environments. Such studies should explore whether the critical factors discovered in this study exist in other situations. Although, the developmental approach used in Papua New Guinea was considered successful, it is important to ascertain if this approach would have similar results when transferred to other countries. Further studies and more evidence need to be accumulated in order to determine more precisely the relationships between and among outcomes, influencing factors, skill-learning, organizational development, technology transfer, and the developmental approach.
Dear Mr. Karel

The Department of Health, the University of Papua New Guinea, the USAID Child Survival Project and the WHO have all been involved in a cooperative effort to provide technical support to the provinces in developing 5 Year Health Plans. While we believe this to have been of great value to the development of our department's capacity to plan and manage our health system, we still have many questions about what has made it a success and how we can build on that success.

As a result, the Department of Health is fully supportive of your proposal to review the provincial health planning process and to examine which factors were associated with the relative success or failure of this endeavour. We encourage you in this project and offer the full cooperation of the department in its completion.

Thank you for your cooperation.

Sincerely yours,

L. SIALIS (DR)
Secretary for Health
Background

(To be read/discussed with each interviewee before asking questions. This is intended to re-introduce the investigator, the purpose of the study, and to make the interviewee feel more relaxed and comfortable before proceeding.)

The Secretary for Health, Dr. __________, has requested that I do an examination study of the Provincial Health Planning Process in Papua New Guinea. The Government is interested in finding out if this process has achieved its objectives and the reasons or factors for its success or failure. This information will provide valuable feedback to the National Department of Health and the donor agencies involved in finding out the best way to provide technical support to the Provincial Divisions of Health.

Your participation, cooperation and very honest answers will be important in helping this examination interview be successful. That is why Dr./Mr. __________, your Provincial Assistant Secretary for Health, has asked you to cooperate with me in this interview. All your answers will be confidential and your name will not be on the report.

This interview, and others, will form the basis of the examination study of the Provincial Health Planning Process. A considerable amount of time, money, effort and other resources went into this planning process to help the provinces develop five year health plans. Now we want to find out if it worked and why or why not. You can help a great deal by answering the interview questions honestly and to the best of your knowledge.

As soon as they study is complete, copies will be provided to the National Health Department, donor agencies involved, and Provincial Divisions of Health. You and each individual interviewee will have access to the final report.

Thank you very much for taking the time to have this short interview.
Before we start, let me tell you a little about the interview process. You will be asked two kinds of questions. In some cases, I will be asking you to answer questions in your own words. In those cases, I will write down what you say. For other questions, you will be asked to choose the answer that best represents what you think.

Now let’s begin.

Background Information.

Name ___________________________________________ Date __________________________

Age_______ Years of schooling complete______________________________

Province of work_____________ Province of origin______________________________

Professional job category________________________________________

Length of time working in this category______________________________

Length of time working in this province_____________________________________

Part A. Provincial Health Planning Process

This part includes questions to examine the possible associated factors.

Q1. Did you take part in the provincial health planning workshops?
   yes ( )   no ( )   don’t know ( )

Q2. Did you take part on the provincial health planning committee?
   yes ( )   no ( )   don’t know ( )

Q3. Did you complete/write a chapter or section of your provincial health plan?
   yes ( )   no ( )   don’t know ( )

Q4. The Provincial Health Planning Process utilized training modules, two workshops, facilitators, and technical support. Which of these factors were helpful to you in making your health plan? ____________________________
Q5. Was there political support for making a health plan in your province?

very much ( )  some ( )  very little ( )

Please explain

Q6. What do you think was the most important reason(s) or factor(s) in the success or failure of your province to complete its health plan? (Probe for more specific, detailed response.)


Q7. What was the most helpful component or aspect of the Provincial Health Planning Process for you? Why?


Q8. What was the least helpful component or aspect of the Provincial Health Planning Process for you? Why?


Q9. What would be your overall grade or evaluation of the Provincial Health Planning Process? Why?


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Part B. Individual Health Planning Skills

This part specifies which health planning skills were learned.

Q10. Did you learn skills in using (analyzing/interpreting) health data during the Provincial Health Planning Process?

very much ( ) some ( ) very little ( )

Q11. Did you learn skills in developing goals, objectives and indicators?

very much ( ) some ( ) very little ( )

Q12. Did you learn priority setting skills?

very much ( ) some ( ) very little ( )

Q13. Did you learn skills in formulating strategies?

very much ( ) some ( ) very little ( )

Q14. Did you learn how to prepare activity plans?

very much ( ) some ( ) very little ( )

Q15. Did you learn how to prepare a fully costed budget?

very much ( ) some ( ) very little ( )

Q16. Which of these health planning skills have you use? How?

__________________________________________________________________________

__________________________________________________________________________

Q17. Do you think you can write/make your own/another health plan now? Why?

__________________________________________________________________________

__________________________________________________________________________
Part C. Provincial Organizational Development

This part specifies which organizational development components or aspects were enhanced.

Q18. Do you think the provincial health managers learned how to work together as a team as a result of the Provincial Health Planning Process?

very much ( ) some ( ) very little ( )

Q19. Do you think the provincial health managers will use a more participative, collaborative approach to work now?

very much ( ) some ( ) very little ( )

Why?

Q20. Do you believe provincial health managers learned how to introduce planned change into their daily operations?

very much ( ) some ( ) very little ( )

Why?

Q21. Do you think the provincial health managers can solve problems more effectively now?

very much ( ) some ( ) very little ( )

Why?
REFERENCES


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