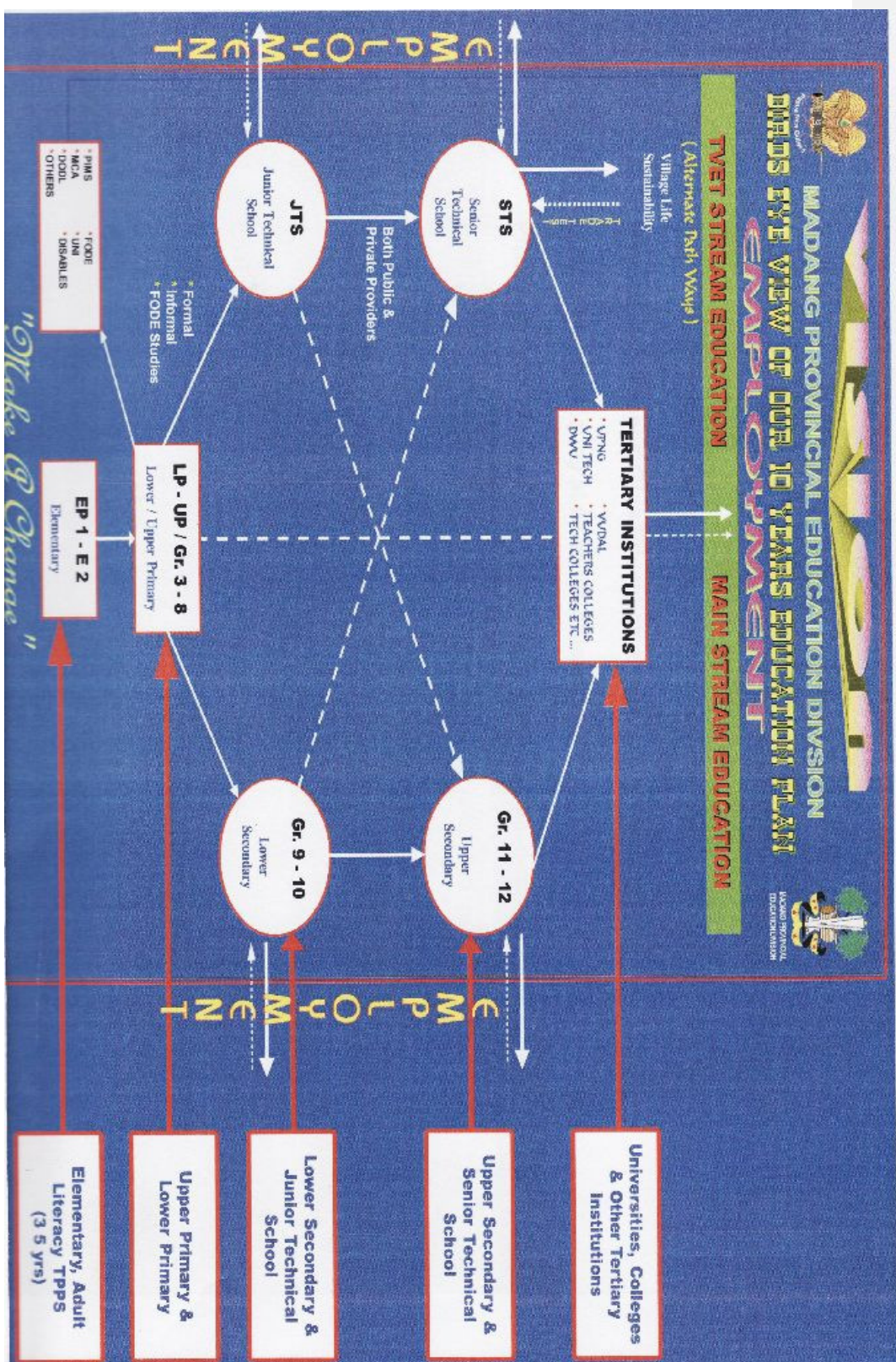


**MADANG PROVINCIAL ADMINISTRATION
DIVISION OF EDUCATION**



**ADVANCING THROUGH
OTHER PATHWAYS**

**10 YEAR PROVINCIAL
EDUCATION PLAN
2009 - 2018**



ACKNOWLEDGEMENT:

May I take this privilege in acknowledging the many individuals and organizations that have contributed towards the formulation of the Madang Provincial Education Ten Year Development Plan, 2009 – 2018.

Credit is given to the Madang Provincial Education Board for its wisdom and choice of highly resourceful and dedicated membership of the Consultative Committee. Mr. Anton Yagama with his inspiring leadership has led the Committee on numerous visits to all districts of the Province. We highly appreciate contributions done by the former Education Director Mr Christopher Bulu for his contributions towards the development of the plan.

The Madang Provincial Government is applauded through the then Acting Governor for Madang Province, Honorable Bunag Kiup, the chairman of Education Committee, Honorable Wanas Kosi and the Madang Provincial Administrator, Mr. Joseph Dorpar for their support towards the development of this plan.

We also acknowledge the contributions of past leaders, namely Mr. Mafuk Gainer and Mr. Peter Nombo, both former MPs for Raikos, Mr. Godfried Aringawa, former MP for Middle-Ramu, and Mr. Kare Maor, former MP for Sumkar. Their vision and wisdom expressed through the consultations and what they perceive to be our new pathways for the future are highly praised.

The Province also acknowledges with appreciation the assistance and advice rendered by Mr. Geoffery Thompson and Mr. Raphael Pavuo from the National Department of Education for the vital statistical information as well as the formatting and final touches on the plan. The TVET Division through the Assistant Secretary, Mr. Kingsley Degoba and his officers for the assistance in putting together the TVET component of the Madang Education Plan and one the Province wish to test with boldness.

Line Departments include the Department of Primary Industries, Trade and Industry and the Department of Community Development for an integrated programs in the TVET Sector. Organizations such as the Provincial AIDs Council, Provincial Women's Council, the Madang Chamber of Commerce, Church Organizations and the South Pacific Commission are also acknowledged for their contributions in one way or another.

Special thanks to the Education Capacity Building and the PRIDE Project for their contributions and Madang Teachers College for the initiation of training Program to meet the needs of the Province.

Finally, but not the least, we appreciate the efforts and support of everyone, both young and old, from all walks of life and in whatever form of contributions. This is truly the people's Plan and to see that this goal is achieved, partnership in Education must be strengthened by all Stakeholders. This means there must be sound relationship established between all parties involved. There must be more consultation, more involvement and more participation in terms of School based decision-making and problem solving.

Thank you all so much and God Bless.

Moses Sariki (Mr)
Acting Director - Education

Message from the Governor, Madang Province



As the Governor of the Madang Provincial Government, I am proud to acknowledge the Madang Provincial Ten Year Education Plan (PEP) for 2009 to 2018. The Plan presents a bold new vision for education, reflecting **Access, Equity, Quality, Multi-skills** and **Excellence** for both the Madang Province and Papua New Guinea.

Madang and West New Britain Provinces commenced the implementation of the Education Reform Policy in Papua New Guinea at the beginning of 1993. The last Madang Provincial Education Plan (1996 – 2004) built on bold initiatives in education which saw the establishment of 324 elementary schools, converted 148 community schools to primary, three high schools to secondary and two vocational centers. In this ten year plan the province is expected to open up 447 elementary schools, 56 primary schools, three more secondary schools, two new high schools and six new junior technical schools which will change status to senior technical schools in the later part of the plan period. At least three junior technical schools will form the clusters for each of the senior technical schools in each district respectively.

This Ten Year Plan (2009-2018) is an even bolder one as it provides the road map which challenges several major outcomes:-

- Universal Primary Education (UPE) or Universal Basic Education (UBE) by the end of the planned period.
- Increased access to Secondary Education.
- Major Shift to Technical Vocational Education (TVET) for an alternate pathway.
- Strengthening of Flexible, Open and Distance Mode of Education to provide access through to tertiary education.
- Strengthening of Management capacity in both the education branch in the districts order to achieve quality Education.

This Plan is truly a people's Plan as demanded through the consultative process. It responds to the call of the wider community sectors and one which all levels of the Government must address. These changes will require support from all sectors of the community - politically, financially and morally. I am proud to be part of the whole partnership with all the stakeholders such as the National Government, the Provincial Government, the Local Level Government, the wider community and as well as the support from the Overseas Donors towards implementing the plan.

The Madang Province has 162 languages the largest in Papua New Guinea. This cultural diversity provides enormous challenges for implementing elementary education in our Province. Also many of our people live in small remote villages inland along the Ramu Valley and along the Finisterre Mountains and have missed out on education since independence 31 years ago. This Ten Year Plan marks the beginning of a new thirty years journey for Madang Province. With the main emphasis in 100 percent access in Elementary Education for all six year old in the Province, the introduction of Grade ten Lahara Program in Madang Teachers College for Remote local teachers and the effective quality management practices for our education system, we will strive to provide a better quality education through effective team work for everyone in Madang Province.

Madang Province according to the plan will take a lead in the Technical Vocational Education Reform initiative which strongly reflects the call from the recipients of the education system in which I wish to strongly call for policy changes to make it work for the people. **I firmly believe that we can achieve the objectives of the Plan through honesty, good governance and accountability in the delivery of education services in the Madang Province.**

In conclusion, I wish to thank the Madang Provincial Education Board, the Provincial Education Consultative Committee and the Education Planning Team for the time taken to produce this document and once again call upon all parties - Governments, Communities and individuals to join heads together and give the utmost support and implement this Plan.

Chief Sir Arnold Amet, Kt, MP

Governor - Madang Provincial Government

Table of Contents

Education Structure	ii
Acknowledgments from Provincial Education Director	iii
Message From Governor – Madang Provincial Government	iv - v
Table of Contents	vi
List of tables	vii
List of figures	viii
Section 1: Introduction	1
Papua New Guinea	<u>2</u>
Madang Province	<u>3</u>
Geography	3
Population	4
Languages	5-6
Provincial Economy	6 -7
Provincial Government	7 - 8
Social issues	9 - 10
Organization of the Plan	10
Section 2: Our Vision	11 - 18
Section 3: The Plan for Education	19 -
Elementary	20
Situation analysis	21-22
The Plan	23-30
Implementation schedule	31-33
Monitoring	34
Primary	35
Situation analysis	35-37
The Plan	38-45
Implementation schedule	46-48
Monitoring	49
Secondary	50
Situation analysis	51-52
The Plan	53-59
Implementation schedule	60-61
Monitoring	62
TVET	63
Situation analysis	63-65
The Plan	66-75
Implementation schedule	76-77
Monitoring	78
Flexible, Open and Distance Education	79
Situation analysis	80
The Plan	81-86
Implementation schedule	87-89
Monitoring	89
Section 4 Administering The Plan	90
The Plan	91-97
Implementation schedule	98-99
Monitoring	100
Section 5:Financing the Plan	101 - 105
Section 6:Appendices	106 - 110
Existing and planned elementary schools & teacher requirements	106
Existing and planned primary schools & teacher requirements	107
Existing and planned high schools & teacher requirements	108
Existing and planned TVET schools & teacher requirements	109
Plans for education capacity building- refer to documents	110

List of Tables

Table 1 Total Population by District – 2000 & 2006.....	4
Table 2 Total Population Distribution by Age Groups.....	4
Table 3 Languages of the Madang Province.....	5
Table 4 Agriculture Activities to household population in Madang Province	6
Table 5 Local Level Governments in Madang Province by District	7
Table 6 AGE Extension Programs to Districts over the Planned Period.	9
Table 7 Elementary school enrolments by gender, 2000 to 2007.....	21
Table 8 The Population of 6 year old for the planned period.	23
Table 9 Projected Elementary enrolment by selected years to 2017.....	23
Table 10 New Elementary Preparatory classes required by selected years to 2017.....	24
Table 11 Projected Elementary teacher requirements by selected years to 2017.....	24
Table 12 No. teachers to be trained by selected years, 2007-2017.	27
Table 13 Number of trainers by District.....	27
Table 14 Projected Function Grants by year.....	29
Table 15 Current status per District.	34
Table 16 Student Enrolment by Grade and gender, 2000 to 2007.	35
Table 17 Projected Primary school enrolment by selected years, 2007 to 2017	37
Table 18 New Grade 7 classes required, by selected years, 2007 to 2017.....	37
Table 19 Primary school staffing by selected years, 2007 to 2017	38
Table 20 Projected Secondary school enrolment by selected years, 2007 to 2017.	51
Table 22 Secondary school transition rates, selected years, 2007 to 2017.	51
Table 23 Projected secondary school teacher requirements, 2007-2017.....	54
Table 25 Vocational centre staffing, 2000 to 2004.....	62
Table 26 The planned review and rationalization for each institution in the Province.	63
Table 27 Types of Vocational Institutions.	65
Table 28 Range of program and courses to be offered by conventional centers.....	65
Table 29 Vocational centre enrolment selected years, 2007 to 2017.....	66
Table 30 Projected technical schools establishment by district.	66
Table 31 Vocational centre staff requirements, 2007 to 2017 (selected years).....	69
Table 32 Current FODE enrolment –	76
Table 33 Projected FODE enrolments by Grade and selected years, 2006 to 2015.....	78
Table 34 Total teacher salary costs by sector (K'000s), selected years, 2006 to 2015	100
Table 35 Unit salary costs by sector (Kina), selected years, 2006 to 2015.....	100
Table 36 Projected leave fares (K'000s), selected years, 2006 to 2015.....	100
Table 37 Function grants by sector (K'000s), selected years, 2006 to 2015	101
Table 38 Percentage allocations of function grants to basic and post primary education, selected years, 2006 to 2015	101
Table 39 Summary of National Government costs (K'000s), selected years, 2006 to 2015.....	101
Table 40 Post primary maintenance and new infrastructure costs (K'000s), selected years, 2006 to 2015.....	101
Table 41 Provincial administrative costs (K'000s), selected years, 2006 to 2015.....	102
Table 42 Total teacher in service costs (K'000s) by sector, selected years, 2006 to 2015	102
Table 43 Total Provincial Government costs (K'000s), selected years, 2006 to 2015	102
Table 44 Basic education maintenance and new infrastructure costs (K'000s), selected years, 2006 to 2015	103

List of Figures

Figure 1 Map of Papua New Guinea.....	2
Figure 2 Map of Madang Province	3
Figure 3 <i>Prep enrolment versus 6 year old population</i>	24
Figure 4–Flow chart showing decentralization of FODE services.	79
Figure 5. The Proposed Madang Provincial Education Branch structure.....	89

Section 1

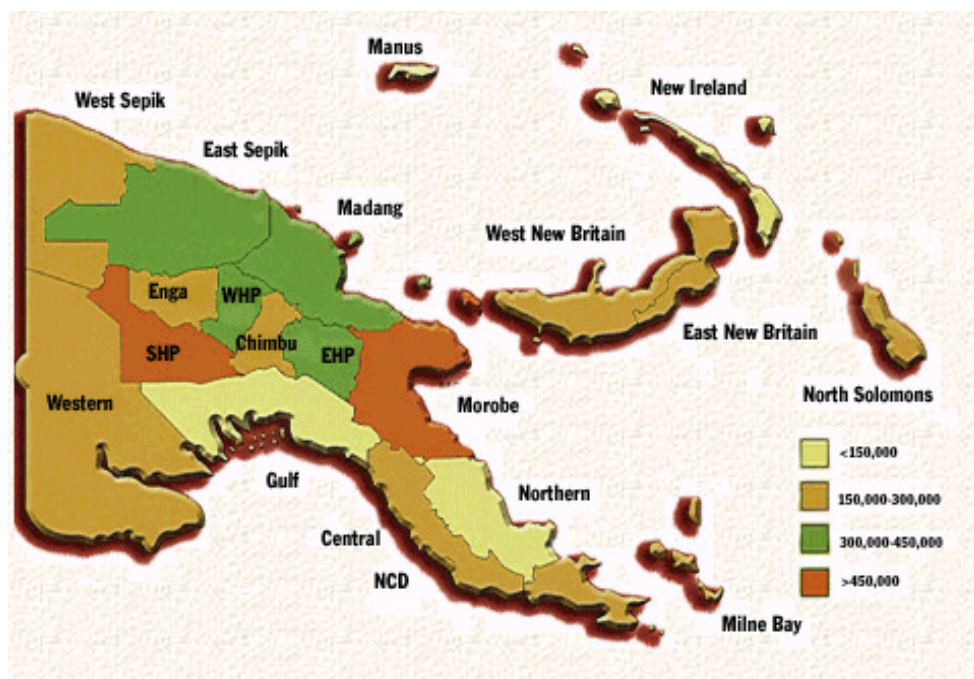
INTRODUCTION

1. PAPUA NEW GUINEA

1.1 Back ground of the country

Papua New Guinea, independent nation in the southwestern Pacific Ocean, located North of Australia and East of Indonesia. Papua New Guinea occupies the eastern half of the island of the New Guinea called the mainland and the several other small islands. The Western part of New Guinea forms the Indonesian province of Irian Jaya. Most Papua New Guineans live in rural villages along the coast or in the rugged interior. The country got its independence from Australia in 1975. The capital city of Papua New Guinea is Port Moresby located in the mainland's southeastern coast. Papua New Guinea has a total area of 462,840 sq km (178,704 sq mi) of which nearly 90 percent is on the mainland. The principal natural resources in Papua New Guinea are mineral resources, particularly copper, cobalt and nickel, gold and timber from the forest. The country has two types of seasons every year round call wet and dry seasons (Microsoft Encarta Encyclopedia, 2002).

Figure 1 Map of Papua New Guinea

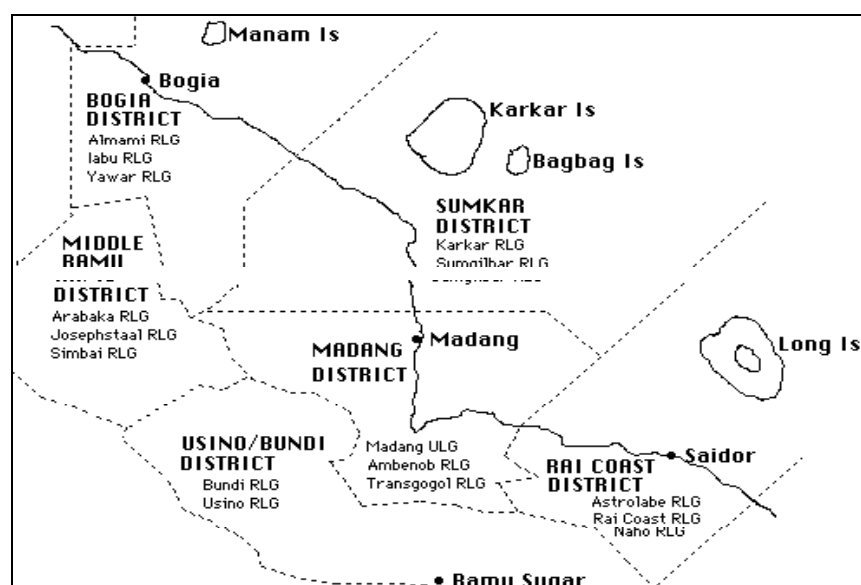


Source: 2000 Census Database

2. MADANG PROVINCE

2.1 GEOGRAPHY

Figure 2 Map of Madang Province



Source: District Summary Volume III 2002 – 2007

The Madang Province extends along 350km of coastline with the Bismarck Sea. Its northern coastline holds the main islands such as the spectacular active Manam Island volcano, Karkar and Bagabag, and to the south Crown Island and Long Island.

The wide fertile coastal plain is criss-crossed with several large rivers; the Ramu is by far the largest. It runs for more than 250 km through the center of the province and is bordered by a large, dense and lucrative tropical rainforest.

Other major rivers are the famous Gogol, Kumil, Dibor, Gilagil, Tapo, and Gum Rivers.

There are four main mountain ranges which provide the rugged terrain; the Adelbert along the north coast; the Finisterre along the south coast; and the Bismarck and Western Schroeder Ranges which form the backbone along the southwestern border of the province. This is where the mighty Ramu River winds its way to the coast forming a southern and northern border for the province.

All of this gives a total land area of 22,839 square kilometers across the six districts. Most of the population lives along the coast in clusters. Those in the hinterland live in isolated hamlets and the Raikos, Middle Ramu and Usino Bundi Districts have much lower population densities than elsewhere in the province.

The rugged nature of the terrain often makes it very difficult to bring infrastructure development and also to link the districts in terms of government and provision of basic services to the people.

1.2 POPULATION

The Madang province had a population of 365,106 in 2000 census figures with a growth rate of 2.7%. The population increased between each of the three census counts (1980, 1990, 2000) and is currently ranked 5th in PNG.

The table below shows the population by District from 2000 to the year 2006. The population growth rate is estimated to be 2.7%.

Table 1 Total Population by District – 2000 & 2006

District	Population - 2000	Growth Rate (%)	Population – 2005 Est.
Bogia	57,104	2.7	65,358
Madang	86,693	2.7	99,223
Middle Ramu	57,879	2.7	66,245
Sumkar	67,052	2.7	76,743
Raikos	56,299	2.7	64,436
Usino Bundi	40,099	2.7	45,872
Total:	365,126	2.7	417,877

Source: NSO Census 2000, Madang Census Office

Madang District is the most populous district with 86,693 (24%) of the provincial population, closely followed by Sumkar district, Middle Ramu, Bogia, Raikos and then Usino Bundi.

Table 2 Total Population Distribution by Age Groups

Age	Total
0 – 4	65,955
5 – 14	106,007
15 – 44	170,789
Over 45	49,859

Source: NSO Census – 2000

With a young population Madang population is projected to grow to 446,266 in 2010 based on the 1990 population and growth rate (NPP, 2000-2010). Assuming the population will grow at that rate annually, the Province will have to about 13,225 by 2020.

The main development implication arising from the projected population growth over the next two decades is that the provincial economy will have to absorb more than 225,000 additional persons during this period. More importantly improving the quality of life, raising the level of living and maintaining environmental quality.

Therefore the key issues are firstly, will the provincial human resources (education, training skills motivation, health status etc.) be improved while population continues to grow and secondly what steps can be taken to bring the rate of population growth down so that improving the quality of human resources becomes a more manageable task in the long run?

For Madang Province to progress ahead through economic development, the population development challenges must be accommodated to bring changes. The reforms are not only seeking to provide greater access to education for our citizens, but they must also do so in a situation where the population is also expanding.

1.3 LANGUAGES

An SIL 1995 study showed that in Madang there are 162 languages for a population of 365,106. Forty-four of these languages have orthographies (alphabets) i.e. 27% of the languages for 76% of the population. There is still a major task to be carried out in the Province. Fortunately, SIL has a training center at Nobonob and so support for this major task can be expected from this organization. Also the SIL information doesn't record the amount of work already commenced in many of the TPPS which have made a start in preparing alphabets. It is important that trained linguists analyze this work and meet with community leaders to prepare orthographies acceptable to all.

Table 3 Languages of the Madang Province

No	Language	Pop	Orth	No	Language	Pop	Orth	No	Language	Pop	Orth
1	Abasakur	761	-	55	Gwahatike	946	yes	109	Nekgini	430	-
2	Aiome	751	-	56	Haruai	1,000	-	110	Neko	315	-
3	Akrukay	191	-	57	Hinihon	1,100	-	111	Nent	2,000	yes
4	Amaimon	366	-	58	Igom	1,082	-	112	Ngaing	3,000	-
5	Amele	5,300	yes	59	Inapang	1,611	-	113	Nobonob	2,400	yes
6	Anam (Pon)	684	-	60	Isabi	280	-	114	Ogea	500	yes
7	Anamgura	1,253	-	61	Isebe	913	-	115	Panim	152	-
8	Andarum	1,084	-	62	Jilim	409	-	116	Parawen	429	-
9	Anjam	1,300	yes	63	Kaian	322	-	117	Paynamar	150	-
10	Anor	574	-	64	Kalam	15,000	yes	118	Pulabu	116	-
11	Apal	548	yes	65	Kare	384	-	119	Rao	6,000	yes
12	Arawum	75	-	66	Kesawai	538	-	120	Rapting	332	-
13	Arop	2,200	yes	67	Kire	2,000	yes	121	Rawa	7,138	yes
14	Asas	333	-	68	Kobon	6,000	yes	122	Rempi	592	-
15	Asat	659	-	69	Koguman	943	-	123	Rerau	235	-
16	Atemble	65	-	70	Koliku	300	-	124	Romkun	389	-
17	Awadbing	700	yes	71	Kolom	209	-	125	Saep	584	yes
18	Awar	572	-	72	Korak	205	-	126	Samosa	94	-
19	Bagupi	58	-	73	Kowaki	31	-	127	Saruga	129	-
20	Baimak	441	-	74	Kwato	778	-	128	Sausi	495	-
21	Bargam	3,500	yes	75	Lemio	175	-	129	Sepa	268	-
22	Bau	1,789	yes	76	Lilau	449	-	130	Sepen	428	-
23	Bemal	700	-	77	Maia	2,500	yes	131	Sihan	314	-
24	Bepour	57	-	78	Maiani	2,496	yes	132	Sileibi	259	-
25	Bilkura	34	-	79	Mala	769	yes	133	Silopi	140	-
26	Bilbil	700	-	80	Malalamai	341	-	134	Sinsauru	476	-
27	Biyom	379	-	81	Malas	220	-	135	Siroi	1,000	yes
28	Bongu	415	-	82	Male	393	-	136	Songum	326	-
29	Borei	2,000	yes	83	Manam	6,500	yes	137	Sumau	2,509	yes
30	Bosngun	717	-	84	Mari	806	-	138	Tai	1,000	yes
31	Breri	1,100	-	85	Matepi	238	-	139	Takia	20,000	yes
32	Bulgebi	52	-	86	Matukar	219	-	140	Tangu	3,000	yes
33	Bunabn	498	-	87	Mauwake	2,000	yes	141	Tanuat	506	-
34	Dami	1,495	yes	88	Mawak	31	-	142	Tauya	347	yes
35	Danaru	115	-	89	Mawan	269	-	143	Ukuriguma	134	-
36	Degenan	358	-	90	Mebu	319	-	144	Urigina	1,404	-
37	Dimir	1,700	yes	91	Medebur	429	-	145	Usan	1,400	yes
38	Domung	2,000	-	92	Megiar	859	-	146	Usino	1,630	yes
39	Duduela	469	-	93	Miani	1,500	yes	147	Usu	93	-
40	Dumpu	261	yes	94	Mikarew	8,600	yes	148	Utarmbung	480	-
41	Dumun	42	-	95	Mindiri	93	-	149	Utu	583	-
42	Faita	57	-	96	Moere	56	-	150	Wab	142	-
43	Forak	163	-	97	Monumbo	459	-	151	Wadaginam	546	-

44	Gabutamon	302	-	98	Morafa	672	-	152	Wagi	2,000	yes
45	Gal	224	-	99	Moresada	197	-	153	Wamas	135	-
46	Ganglau	154	-	100	Mosimo	58	-	154	Wanambre	489	-
47	Gants	1,884	-	101	Mum	3,286	yes	155	Wandabong	496	-
48	Garus	1,394	-	102	Munit	345	-	156	Waskia	18,000	yes
49	Gedaged	2,764	yes	103	Murupi	301	-	157	Watam	376	-
50	Gende	8,000	yes	104	Musak	355	-	158	Yaben	702	-
51	Gira	500	-	105	Musar	684	-	159	Yabong	370	-
52	Girawa	4,003	yes	106	Nahu	6,000	yes	160	Yagomi	137	-
53	Guirak	131	-	107	Nake	173	-	161	Yanguilam	180	-
54	Gumalu	271	-	108	Nankina	2,500	yes	162	Yoidik	266	-

1.4 PROVINCIAL ECONOMY

The Provincial economy consists of both the formal and the informal sector which maintains over 80 percent of the subsistence population of the Province. This area has a significant impact on the lives of the rural population as it is a valuable source for meeting the household's needs. Surplus produced are mainly used for trade within the neighboring communities.

It is assumed that for the period of the plan most Madang children will be entering a cash cropping economy and as such need to have the basic skills, attitudes and knowledge provided for in primary education.

Table 4 Agriculture Activities to household population in Madang Province

Commodity	Total Household	Engaged	Cash	Own use
Cocoa	60,709	24,090	23,691	399
Coffee	60,709	13,554	12,681	873
Rubber	60,709	341	45	296
Oil Palm	60,709	568	172	396
Coconut	60,709	35,581	19,037	16,544
Betel nut	60,709	42,934	15,346	27,588
livestock	60,709	23,830	3,183	20,647
Poultry	60,709	19,371	2,468	16,903
Food Crops	60,709	46,322	8,076	38,246
Fish	60,709	15,059	2,643	12,416
Others	60,709	403	387	16
TOTAL		22,053	87,729	134,324

Source: NSO Census – 2000

The formal sector is a growing enterprise and constitutes the Commercial, manufacturing Agriculture and the mining sector. Tourism is one of the largest growing industries and is currently the third largest source of foreign revenue for the province.

The manufacturing sector employs over an estimated 6,000 employees. The main investments in the province are Ramu Sugar, WD and HO Wills cigarette factory, John Barnes Meat Cannery, RD Tuna Fish Cannery and Madang Timbers. The Madang based FRG clothing company is a joint venture between the Commonwealth Development Corporation (CDC), local and overseas investors. It employs approximately 200 people, most of them women.

The Krumbukari Cobalt and Nickel mine and Yandera (Marengo) Gold Mines will play a significant role in the provincial as well as the national economy. Both projects will consist of approximately K4 billion in expenditure and with the project life time of some 20 to 30 years, there

will be a considerable contribution to the economy in terms of goods and services as well as spin off benefits for the local people. This will be done through the establishment of small and medium sized businesses associated with the operation of the mine, royalties paid to landowners, employment of local people and revenue gained by the provincial government through the strengthening of the tax base.

The extensive tropical rain forest of Madang covers about 700,000 hectares. Two thirds are commercially viable with the existing operational timber area covering almost 200,000 hectares. Logging is expected to continue for another 30 years with production averaging over 60,000 cubic meters per year, representing around K8 million average annual gross earnings.

1.5 PROVINCIAL GOVERNMENT

The Organic Law on Provincial and Local - level Government (OLPLLG) provides for the strengthening of the Local - level Governments. The structure for administering the OLPLLG at the different levels of government and the links between the various decision making bodies is set out below.

The Madang Province has a Provincial Assembly and six districts based upon the electoral boundaries. Table 5 shows the districts and Local - level Governments approved by the National Executive Council for the Madang Province.

Table 5 Local Level Governments in Madang Province by District

DISTRICT	LOCAL-LEVEL GOVERNMENT
Bogia	• Almami Rural Local-level Government • Yabu Rural Local-level Government • Yawar Rural Local-level Government
Madang	• Madang Urban Local-level Government • Ambenob Rural Local-level Government • Transgogol Rural Local-level Government
Middle Ramu	• Arabaka Rural Local-level Government • Josephstaal Rural Local-level Government • Simbai Rural Local-level Government • Kobon Rural Local Level Government
Rai Coast	• Astrolabe Rural Local-level Government • Nahu/Rawa Rural Local-level Government • Rai Coast Rural Local-level Government * Naiyudo Rural Local Level Government
Sumkar	• Karkar Rural Local-level Government • Sumgilbar Rural Local-level Government
Usino/Bundi	• Bundi Rural Local-level Government • Usino Rural Local-level Government * Gama Rural Local Level Government

Section 10 of the OLPLLG provides for the Provincial Assembly to be composed of:

- all national MPs representing the electorates in the province
- up to four appointed members (Business community, Church, women, NGO)

All members, whether elected or appointed, enjoy full voting rights. The Governor of the Province is the Chairman of the Provincial Assembly and also heads the Provincial Executive Council (PEC). The PEC constitutes the chairs of the various permanent committees.

It is hoped that all levels of government will have a greater involvement in education, especially at the local government level where it is hoped that communities will use their local governments to improve their school's infrastructure. i.e. through building and maintaining classrooms, teacher's houses, water supplies, toilet facilities, roads to schools, etc.

The Provincial Government organic law created District Program Managers who will have the responsibility of establishing District Education Boards. In close consultation with the District Administrator and working with the Local Government Councils and the local politicians they will plan and budget for education within their district. They will represent the Education Division on the District Budget and Planning Priority Committee to ensure that the schools in the district have the facilities they need, and have proper maintenance.

1.5.1 PROVINCIAL DEVELOPMENT GOALS

The Madang Provincial Government's seven Development Priority areas are – Health, Education, Infrastructure, Law & Order, Economic Activities, Environment and Good Governance. These development priorities are formulated through comprehensive community consultation and analysis of the current situation and are as follows:

- Promote integral human development with emphasis on Family, Education, Health and Spiritual developments of the people.
- Ensure increased finance and investment with emphasis on the development of infrastructure in the province.
- Encourage economic activities based on primary produce under local control and participation in the province.
- Encourage and participate in the implementation of the Government Reform.
- Protection of natural flora and fauna, land resources.
- Establish effective law and order system in the province.

1.5.2 Provincial Education Mission Statement

The Madang Provincial Division of Education is embarking on the National Education mission and that is:

- to facilitate and promote the integral development of every individual
- to develop and encourage an education system which satisfies the requirements of Madang and its people
- to establish, preserve and improve standards of education throughout Madang Province
- to make the benefits of such education available as widely as possible to all of the people
- to ensure education is accessible to the poor and physically, mentally and socially handicap as well as to those who are educationally disadvantaged
- to improve educational opportunities and encourage equal gender participation, especially women and girls

1.6 SOCIAL ISSUES FACING THE PROVINCE

1.6.1 GENDER

Madang Province is one of the five Provinces which have the lowest female participation rate in the country. This is indicative of the fact that it has a lowest female enrolment and retention rate in schools. It is anticipated that over the planned period, Madang province will encourage girls' education as it sees the importance of female education in relation to income generation of household, poverty alleviation and human development, an important ingredient for national development.

A greater degree of awareness will be done to ensure that parents first send and then keep their daughters in school. Girls' education will be further strengthened through schools adopting the child friendly school concept. The province considers the Accelerated Girls education program being initiated by UNICEF in the province as positive and will extend this program to all the districts. The current five schools being trailed in 2005 will be expanded to encourage this program. Failure to achieve gender equity goals will have serious implications, and is likely to result in a generation of children – mainly girls- being condemned to lives of ignorance, poverty and misery. The province must move forward and girl's education initiative will be given considerations.

Under the AGE Program, Child Friendly School Project (CFS) was introduced in Sagalau, Ambarina, Alexishafen, Rempi and Megiar. The CFS Project basically gave the opportunity to the girls who have left schools for various reasons to return and complete their basic education. The key elements in the CFS project is to improve the school facilities as well as addressing social and cultural factors so that the school environments are conducive and friendly for all students enrolled (both boys and girls) to stay on to complete their basic education. From the re-enrolment figures, a total of 235 girls out of 300 girls dropped out from the five schools in 2003 and 2004 so far returned. Out of 6 girls that returned to do grade 7 in 2005, 2 were selected to continue onto grade 9 in 2006.

The setback identified after two years of implementing CFS project in the five schools was lack of funds. Funds were needed to improve the facilities and purchase additional curriculum, Materials. School fee problem still remains a problem for the girls who re-enrolled in the five schools.

Table 6 AGE Extension Programs to Districts over the Planned Period.

Districts	Madang District	Sumkar District	Usino-Bundi	Middle-Ramu	Raikos District	Bogia District
1	Sagalau	Rempi	Walium	Aiome	Saidor	Banara
2	Ambarina	Megiar	Usino	Simbai	Bongu	Ulingan
3	Alexishafen	Talidig	Sausi	Chungribu	Biliau	Malala
4	Bahor	Bagabag	Gusap	Sangapi	Male	Tangu
5	Gum	Namau	Negeri	Kenainj	Bugajim	Mekarew
6	Graged	Bumsol	Ono	Josephstal	Erima	Yoro

1.6.2 HIV/AIDS

The Province supports the National Department of Education's (NDOE) HIV/AIDS policy as it sees it as a major step in the Government's multi-sectoral response to fight the HIV/AIDS epidemic in the country through education. This policy provides principles and strategies to guide those involved in the national education system. The Province will work alongside NDOE in the

development of guidelines for the province, district, schools, colleges and workplace to support the implementation of this policy.

The focus is on education of our children as future leaders and catalyst for nation building. We will therefore educate them, as well as ourselves, our officers, teachers and parents on the impact and growing dangers of the dreaded disease. It is important that all levels of the education system implement this policy.

HIV/AIDS epidemic is spreading like a fire in the entire country. If the authorities and the general public do not address its impact on the population, the whole country will collapse. Madang Province recorded its first case in 1987. Over the past 19 years the number of HIV/AIDS cases has increased resulting several deaths and so far 89 Positive cases currently living in the province. The rate of increase in the HIV/AIDS in the province is 0.01%.

The four key strategic areas to be covered in schools under the policy includes -

1. Prevention for students
2. Care and Support for students
3. HIV/AIDS in the workforce and
4. Managing Education's response to HIV/AIDS

The Curriculum Unit will provide supplementary information and resource materials in the four strategic areas to be addressed in schools as outlined in the policy.

1.6.3 Literacy

Literacy is directly related to quality of life. A literate person can find ways to improve life because he or she is well informed and self-reliant. An illiterate person will depend on other people, which become a burden.

The 2000 National Census report showed the literacy rate in PNG stood at 56.2%. This was an improvement of only 11% from 1999 census report of 41.1%. After 30 years of independence, still half of 5.2 million populations (2.6m people) are unable to read and write. Basically, these are the people whose chances of bettering themselves are near zero.

Out of the 300,000 total population of Madang Province, (2000 census), more than half are illiterate, more are women who do not normally have access to education opportunities. Although, efforts made by the Non-Government Organization such as S.I.L, the Bible Translators and World Vision has established literacy programs in the Province for the last 20 years ,much have yet to be achieved in improving the literacy rate. Madang is unique because of the large number of languages and dialects (170 altogether). A lot of these language's orthographies are yet to be researched and written for any form of education program in literacy to be embarked on.

2.0 Organization of the Plan

The Plan is organized in a number of sections as outlined below.

Section 1: Introduction

This section provides background information about the province.

Section 2: Our vision 2009-2018

This section outlines the visions for education by sector.

Section 3: The Plan for education

This is the main section of the Plan. The sectors – elementary education, primary education, secondary education, flexible, open and distance education, technical and vocational education and training - are described using the same format. Each begins with a situational analysis which describes the sector as it is at the moment, progress made since 1995 and constraints. The actual plan is split into four components. These components are access, quality curriculum and monitoring, quality teacher education and training, and management. Each sector has its own vision and its own major outcome. Each of the components has its own minor outcome within each sector, and also key strategies and activities for achieving these outcomes. In the text, the minor outcomes are referred to using the first letter of the sector (E for Elementary, P for Primary and so on) and the minor outcomes are numbered in sequence. E3, then, refers to Elementary Quality Teacher Education and Training, minor outcome number 3.

At the end of each sector there is an implementation schedule that provides a time line for the implementation of each of the strategies and activities.

Targets to be achieved during the life of the Plan are identified in the boxes placed as close as possible to the corresponding text for each sector. Performance measures for each of these targets are identified in the monitoring section at the end of each sector.

Finally, the responsibilities of the major stakeholders are outlined at the end of each sector.

An **outcome** identifies in broad terms the planned destination or end points that the system aims to achieve.

A **major outcome** is the end point to be achieved at the end of this ten year Plan.

A **minor outcome** is a point that has to be achieved on the way to accomplishing the major outcome.

The **strategies** describe the broad means of how the minor outcome will be achieved.

The **activities** will collectively contribute to the successful implementation of the strategy.

Section 4: Administering the Plan

This section outlines how the Plan will be administered and considers human resource management and planning.

Section 5: Financing the Plan

This section considers the financial implications of the Plan.

Section 2

OUR VISION

OUR OVERALL VISION

National

Our vision is integral human development achieved through an affordable education system that appreciates Christian and traditional values, and that prepares literate, skilled and healthy citizen by concentrating on the growth and development of each individual's personal viability and character formation, while ensuring all can contribute to the peace and prosperity of the nation.

Provincial

Integral Human development based on a strong Christian foundation with appreciation of local and traditional values and work culture, achieved through an education system which is financially feasible to the people of Madang Province and which places emphasis on the development of children's self esteem and integrity positive for a productive work ethics and a realization of the value of both rural and urban community development activities in the context of Provincial and National Development.

SECTORAL VISION

Elementary Education

National

At six years of age all children begin their basic education in an elementary school in a language that they speak. For the next three years they develop the basis for sound literacy and numeracy skills, family and community values including discipline, personal health care and the respect for others.

Provincial

All children at the age of three will commence studies in a vernacular language that they speak at the tokples preschool and elementary prep and at the age of six in elementary one and two will acquire Basic English literacy and numeracy skills, family values including discipline, personal health care and respect for others.

Key outcomes in this sector are

- all children at the age of three will have access to their local vernacular in tok ples preschool and elementary prep
- all six year old children will have access to formal education beginning with elementary prep.
- all vernacular program in the communities will be taken on by preschool and elementary prep
- all elementary E1 and E2 will be introduced to English throughout the province
- all children will develop competency in basic literacy and numeracy.
- All bridging programs will be at elementary one

Primary Education

National

At 9 years of age children will continue their basic education in primary school. After six years of primary education that begins with a bilingual program, children will have the skills to live happily and productively, contribute to their traditional communities and use English to understand basic social, scientific, technological and personal concepts and value learning after grade 8.

Provincial

All children in the Madang Province will complete nine years of basic Primary education that begins with a bilingual program. As this will be the only formal education for the majority of students, it must provide them with the education necessary to be productive members of their communities and contribute meaningfully to their traditional communities and use English to understand basic social, scientific, technological and personal concepts and value learning at grade 8.

Key outcomes in this sector are

- Maintain the goal of universal primary education at 100%.
- Achieve 90 – 100% retention rate.
- Improve gender equity to at least 50%.
- Provide adequate supply of curriculum materials
- Improve school infrastructures and facilities
- Upgrade academic performances by providing lab top computer per child
- Provide appropriate skills to school leavers.

Secondary Education

National

Students in grades 9 to 12 achieve their individual potentials to lead productive lives as members of the local, national and international community and partake of further quality education and training, having undertaken a broad range of subjects and work related activities that can be used in everyday life.

Provincial

Students in grades 9 to 12 achieve their fullest potential in knowledge, skills in terms of academic and trade and attitudes relevant to their future lives in both the formal and the informal sector and partake of further quality education and training, having undertaken a broad range of subjects and work related activities at school.

Key outcomes in this sector are

- Increase and more controlled enrolment in secondary schools
- Improve transition rate to 60 percent
- Improve gender equity to 50 percent
- Improve academic and trade performance by introducing new initiatives
- Improve infrastructure and facilities
- Provide academic and trade skills to students at grade 12
- Encourage self reliance in all schools in the province
- Upgrade teacher qualifications and competencies through internal and external study opportunities
- Maintain effective teacher selections and appointments to policy directives.

Technical Vocational Education

National

The education and training needs of the immediate community are catered for by vocational education institutions offering appropriate and relevant courses of varying lengths and giving propriety to those students who have completed grade 8.

A system of self sustaining institutions, under an independent regulatory authority designed to train an appropriate workforce for employment in the formal and informal sector, including self employment with linkages to National Apprenticeship and Trade testing Board and other recognized training providers.

Provincial

A system of education that provides an alternate pathway for school leavers and non school leavers with skills relevant to pursue further education as well as acquiring relevant trade skills for employment in both the formal and informal sector including self employment and linkages to National Apprenticeship and Trade testing Board and other recognized training providers and the step further towards establishing community colleges.

Key outcomes in this sector are

- Open access for all school leavers and non school leavers.
- Develop, review and rationalize courses to meet community and industry needs.
- Improve gender equity to at least 50 percent.
- Improve infrastructure and facilities.
- Relocate, amalgamate and rationalize institutions to provide effective and sustainable programs.
- Develop and implement short courses reflecting community needs.
- Trade courses and Programs to be enterprise driven.
- Prepare students for skilled and semi-skilled workforce.
- Provide appropriate skills to school leavers.
- Encourage self reliance in all schools in the province.
- Upgrade teacher qualifications and competencies.
- Maintain effective teacher selections and appointments to policy directives.

Flexible, Open & Distant Education

National

Students harness all appropriate and affordable technologies to pursue flexible, open and Distance education opportunities.

Provincial

A Non formal system of Education that provides opportunities for further educational advancement for school leavers as well as non school leavers with certain entry and exit points to the formal system and other opportunities accessible for all the children in Madang Province.

Key outcomes in this sector are

- Improve and strengthen the work of Flexible, Open and distant Education and study facilities.
- Provide wide range of academic as well as vocational skills at different levels.
- Increase opportunities for out of school youths and further their education to grade 10 and 12.
- Equip out of school youths for useful skills for community living.
- Increase opportunities for grade 12 leavers to matriculation level.
- Support further training of teachers and education officers through the provision of open learning opportunities.

SECTION 3

THE PLAN FOR EDUCATION

BASIC EDUCATION

ELEMENTARY EDUCATION

Definition

Elementary is the foundation of the formal education system comprising of Elementary Prep to Elementary Two.

Situation Analysis

Access

Currently there are 437 elementary schools in the Province. The last five year plan anticipated 202 schools to be opened over the plan period. The short fall was due to several policy directions and funding constraints in relation to teacher training programs within the Aus-aid/ PNG arrangements administered by the National Department of Education.

The Education Reform has however, seen a marked increase in enrolment over the last six years in the Province in all level of education. Elementary Sector alone has attracted increased enrollment from 8580 in 2000 to over 26,000 in 2007. The number of teachers has also risen in line with the growth in students. The vernacular language will be used in Tok Ples Preschool and elementary prep as language of instruction coordinated by districts while , Elementary one and Elementary two will take on board English as the language of instruction.

Table 7 Elementary school enrolments by gender, 2000 to 2007

		2000	2001	2002	2003	2004	2005	2006	2007
Prep	Male	1765	1298	3076	2860	3476	4855	5571	6221
	Female	1577	1237	2592	2481	3021	4293	5144	5691
	Total	3342	2535	5668	5341	6496	9148	10715	11912
Elem 1	Male	1512	1114	2440	2244	2738	3602	4236	4121
	Female	1347	986	2017	1999	2441	3104	3572	3641
	Total	2859	2100	4457	4243	5180	6706	7808	7762
Elem 2	Male	1278	877	1940	2109	2636	3351	3757	3487
	Female	1101	792	1614	1712	2140	2806	3130	2853
	Total	2379	1669	3554	3821	4776	6157	6887	6340
Total	Male	4555	3289	7456	7213	8850	11808	13564	13829
	Female	4025	3015	6223	6192	7602	10203	11846	12185
	Total	8,580	6,304	13,679	13,405	16,452	22,011	25,410	26,014
%age Female		46.9%	47.8%	45.5%	46.2%	46.2%	46.4%	46.6%	47.4%

Quality Curriculum

The Province has a total of 162 different languages, of which 72 are known to have the orthographies completed. There remains a lot more work to be done and much of these have been through the efforts of the Non-Government Organization, i.e.- S.I.L,B.E.T.A and the World Vision .Efforts in the Province in the development of quality Elementary Curriculum has been much hindered due to the large number of different languages and the lack of Funding for the purpose.

Madang identity is very important through the essence of languages used and their survival. Of the 72 local languages that are written, funding for the development of quality curriculum has been much of a constraint.

The establishment of LAMP centers in the districts to help elementary teachers in their local schools develop their curriculum materials lacked the support from the local level Government. Schools instead resort to self help arrangements within their local communities through the

establishment of village curriculum committees. An ongoing In-services program to assist elementary teachers and curriculum committee has been ineffective.

Quality Teacher Training

The Province has a total of 435 teachers trained to this year, 2009. The anticipated number of teacher training for the last five years is at 960.

Ongoing In-service training, Supervision and Inspections are three main strategies the Province will pursue to address quality in teacher training Program. Apart from teacher training skills, the Management aspects of the overall school organization and curriculum implementation in the schools needs to be clearly identified and linked with the general factors that make a good school.

The high Trainer to Trainee ratio in the Province do not allow for constant and effective supervision in schools. There is an unbalance in the number of trainers in the district, as well as imbalance in distribution and delivery of services. The required number of trainers as dictated by the number of LLGs and the number of schools per district needs to be clearly identified and addressed.

Management

The Province has a total of 11 District Elementary Trainers, One Elementary Inspector and a Provincial Elementary Coordinator. This number is insufficient as the anticipated ratio for the province is 1 Trainer to 30 trainees. The current 1 to 56 is excessive.

The establishment of elementary schools and training of teachers need to be better coordinated together with the school registration and creation of positions. These should be based on anticipated student enrolment. The key issue is in the co-ordination and implementation of the plan at the District level.

Stronger linkages with primary school in regards to curriculum implementation and internal supervision will enhance the standard which will make bridging at grade three much easier. Lower Primary co-ordination will need to establish the language implications within the cluster school to help the bridging program at grade three levels. Improvement to Management of school fees as well as materials will have to be improved. Attitude towards school ownership is evident in most communities whist constraints in financial assistance through establishment grants by LLGs is not encouraging. Ownership of the schools by the community can be achieved through empowering the school Board of Management in decision making, teacher appraisals and teacher selection.

The Plan

Major Outcome

All children in Madang Province will enter elementary at the age of six years and will complete three years of basic education.

Minor Outcome E1

Access

Elementary schools established at the community level in order that all children in the Province enroll at the age of six years.

All children will be provided with the opportunity to enter elementary preparatory grade by 2017 at the age of six and complete three years elementary education in the language they speak and introduction of English. There will be annual enrolment in all schools. In a few cases, repetition will be permitted on agreed criteria.

Table 8 The Population of 6 year old for the planned period.

Year	M	F	Total
2005	6936	6410	13337
2006	7123	6574	13698
2007	7316	6752	14067
2008	7513	6934	14447
2009	7716	7121	14837
2010	724	7313	15238
2011	8138	7511	15849
2012	8358	7714	15843
2013	8584	7922	16506
2014	8815	8136	16951

The table below shows projected enrolment figures. These figures assume that all six year old will enroll in the Elementary Preparatory grade from 2017.

Table 9 Projected Elementary enrolment by selected years to 2017.

	2007	2009	2011	2013	2015	2017
Prep	10332	12101	13871	15640	17409	18362
Grade 1	10551	11217	12986	14755	16524	17879
Grade 2	9100	10332	12101	13871	15640	17409
Total	29983	33650	38958	44266	49573	53650

In order to achieve the target of every six year old child entering elementary school by 2017 there will need to be an average of 45 new elementary prep classes established each year. This is to cater for all communities in the Province. These will be distributed to the districts depending on the current cluster system, the needs and the population distribution. Guidelines will be determined for the establishment of new elementary schools. The cluster system when fully completed will cater the provincial elementary school ceiling of about 771 prep classes. The implementation schedule (attached as appendix) determines as a part of the whole province and the district education plans.

Target E1.1

That all six year old children in Madang will enter the elementary prep grade by end 2018

Table 10 New Elementary Preparatory classes required by selected years to 2017

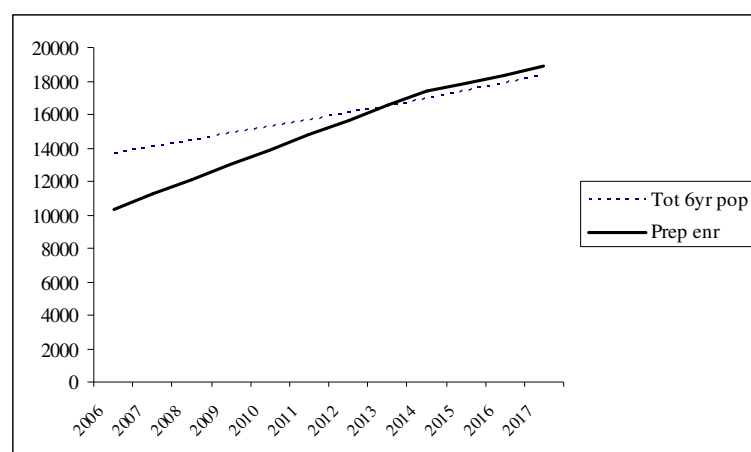
	2007	2009	2011	2013	2015	2017
New Elem Classes	0	45	45	45	44	42

Target: E1.2

An average of 45 elementary Preparatory classes established each year until 2017.

The admission rates and enrolment rates into the elementary schools will rise as shown in the table below. The admission rate is the number of children in elementary prep as a percentage of the six-year old population. The elementary enrolment rate is the number of children in elementary schools as a percentage of the six to eight year age group.

Figure 3 Prep enrolment versus 6 year old population



The table below shows the number of teachers required to teach in the elementary schools in the province. This is assuming that prep class sizes will average 30 children and that multi grade teaching will be used as and when necessary.

Table 11 Projected Elementary teacher requirements by selected years to 2017

	2007	2009	2011	2013	2015	2017
Prep	345	390	431	470	507	518
Grade 1	352	368	411	451	489	512
Grade 2	303	345	390	431	470	507
Total	1000	1103	1232	1353	1466	1537
Ratio	30	30	31	31	32	32

Standard designs will be developed for all elementary school buildings in consultation with stakeholders.

Strategies and Activities:

- ***Establish and maintain a sufficient number of schools in the district.***
 - Establish District Plans for the implementation of Elementary Education.
 - Determine the number of schools to be established annually for each district.
 - Develop guidelines for communities and Local Level Government to use for the establishments of elementary schools.
 - Conduct surveys to identify new elementary school establishments in the district and LLG areas.
- ***Complete all elementary clusters for primary schools for implementation process.***
 - Complete necessary forms for registrations of schools and teachers.
 - Conduct annual review of elementary school structures based upon student enrolment.
- ***Develop and standardized building plans for elementary classrooms and other buildings.***
 - Form committee to include LLGs and other stakeholders to determine designs.
- ***Encourage schools to embark on a child friendly programs and approaches.***
 - Conduct awareness on the importance of schooling, especially the importance of girls' education.

Minor Outcome E2

Quality Curriculum & Monitoring -

A relevant elementary curriculum is developed, implemented and monitored

In order that this outcome is achieved, a number of workshops and in-services will be planned and conducted in consultation with NDOE. The relevant support materials will have to be approved and produced for use by the school.

Target: E2.1

Relevant locally based support materials are produced in all districts by 2018.

The establishment of the District LAMP Centers is to be re-emphasized through the District JDBPC level. The Linkages with the receiving Primary school is vital as the resource materials will enhance the standards for bridging to take effective more convincingly at grade three levels. The existing relationship will need to be strengthened to allow that to take place.

Target E2.2

The District LAMP center be established in all districts by 2018.

The establishment of a Provincial Curriculum Advisory Committee is necessary to screen and approve the production of the support Curriculum materials before its implementation at the school. District Curriculum Advisory Committees will be established comprising education personal at the district level and local community representatives. This committee will support the monitoring and implementation of the curriculum.

Target: E2.3

The District Elementary Curriculum Advisory Committee be established by 2011.

The language of instruction will remain the language the community selected. Standardizing of a common language for all cluster elementary school is necessary for the conveniences at grade three levels as the more variations will have a greater impact on the grade three standards

As the development of orthographies in the Province is less progressive, it is necessary to embark on the few languages that are commonly understood by the children. Un-established orthographies should not prevent the implementation of elementary establishments. Where elementary cluster had to be completed, common language orthography can be used

The current Provincial Administration Structural Reviews which will more likely see two Elementary Trainers in each LLG structure will assist much in terms of Teachers supervision, monitoring and appraisals. Teacher supervision has been a focus of public criticism during the planning consultation visits. The number of trainer-inspectors responsible for elementary schools will rise in line with the capacity building in the districts. The community involvement in the appraisal of teachers will further strengthen the monitoring of teachers performance and behaviors.

Target: E2.4

All BOM to contribute to teachers appraisals by 2010.

Strategies and Activities:

- ***Support the formation and define the role of district Curriculum Advisory Committees.***
 - Provide support for elementary schools in the development and use of relevant community based support materials.
 - Develop, produce and distribute relevant support materials for all subjects at the elementary level.
- ***Support the establishments of District LAMP centers in the districts.***
 - Provide the support for material costing and equipment for the district Lamp centers.
 - Provide the technical support for the use and management of the district LAMP centers.
- ***Liaise with Non-government organizations for the development of orthographies in the districts.***
 - Provide support for the development of locally based support material in the districts.
- ***Assist the elementary TICs for the role of Elementary site leader at the district level.***
 - Support BOM members through in-service and workshops in the appraisals of teachers.

Minor Outcome E3

Quality Teacher Education & Training

Sufficient number of appropriately trained and qualified teachers available for all elementary schools by 2018

The Province will maintain selection of elementary teachers with the community and maintain grade 10 and 12 as a minimum qualification requirement for teacher training. Dialogue with PNGEI will be maintained more closely in order to review the mode as well as the provincial quota for teacher training. Madang Teachers college will be the venue for elementary Teacher training program commencing in 2010. The form of training will be dependent upon a review of elementary teacher training by the Department of Education. Extra training programs including Child Psychology, school Management, Financial Management be included in the training program.

The number of new trainees to be trained each year will be determined by the number of schools to be established each year. The outstanding elementary teacher training will be identified and trained, registered and alliances adjusted and paid in 2009. The current teacher training requirements will be addressed and teachers registered and paid accordingly.

Target: E3.1

163 new elementary teachers to be enrolled in the elementary teacher training program each year.

Table 12 No. teachers to be trained by selected years, 2007-2017.

	2007	2009	2011	2013	2015	2017
Year 1	0	38	64	59	56	29
Year 2	0	65	66	61	57	42
Year 3	0	0	38	64	59	56
	0	103	167	185	172	127

Target: E3.2

Fourteen Elementary Trainers to be trained for the Province by 2010.

As much as the Province would like to see the requirement for trainer/trainee ratio to be 1 to 20, the cost factor is considered to be high. The current number of trainers is 8, which is insufficient to make monitoring efficient and effective.

Table 13 Number of trainers by District

District	No. of LLGs	No. of trainers(Current)	Number Required	Total
Madang	3	1	3	4
Bogia	3	1	3	4
Sumkar	2	2	1	3
U/Bundi	3	1	2	3
Raikos	4	2	2	4
Mid. Ramu	4	1	3	4
Total	19	8	14	22

In-service training will be provided annually for all teachers currently in the field. Cluster based in-service will be embarked on an ongoing program with their feeder primary school. Particular emphasis will be placed on the development of leadership and management skills for elementary school site leaders. This is seen as being particularly important for the leaders of large schools in urban areas. There will continue to be close cooperation between the Division of Education and the Madang Teachers College in relation to the provision of in service.

This approach will strengthen the linkage between the Primary school and their elementary feeder clusters. Other modes of in-services programs to be addressed through District and LLG based in order to cut costs.

Target: E3.3

Constant in-service program is conducted every year to upgrade teaching effectiveness in all elementary school in the Province commencing in 2009.

Emphasis will be placed on primary schools to take more responsibilities over the quality of students in their feeder elementary schools. To facilitate that, linkages between them has to be strengthened through regular cluster based in-services, lesson supervision and appraisals. The Provincial in-service policy will need to regulate this activity.

Elementary is the foundation stage in the formal Education system, and will need to be firmly established to derive at the desired outcome. Teachers' professional development has been a focus of public criticism during the planning consultation visits. This will be addressed through a provincial in service policy. In the next ten years, the Province will ensure that the elementary education is firmly established through quality education programs which will flow onto the Primary and secondary sector. Quality Education for Madang Province is of paramount importance.

Target: E3.4

Produce a Provincial In-service Policy to strengthen the current Teacher Training and in-service program by 2009.

Teacher education will be supported for both pre-service and in-service levels. Pre- service students will have their fees subsidised and elementary schools will be allocated K100 per teacher for in-service activities.

Strategies and Activities:

- ***To ensure sufficient teachers are trained for elementary schools.***
 - Assist Madang Teachers College Administration to finalize selection Criteria for selecting elementary teachers for training beginning 2010
 - Liaise with PNGEI for the approval and training of the required number of Trainers.
- ***Provide professional development opportunities for all elementary teachers***
 - Produce a Provincial In-service Policy to strengthen the current Teacher Training and in-service program.
 - Provided leadership and management training for elementary school site leaders.
 - Liaise with the Provincial Administration that the position of the Provincial In-service Coordinator is filled.
 - A committee is to be formed through the PEB In-service Sub-Committee to draft the Provincial In-service Plan and policy.
 - Liaise with the LLGs for an annual grant to support the Elementary In-service Programs.

Minor Outcome E4

Management

Elementary Education is cost effective and affordable by Parents and Government.

In order to achieve the major outcome which is making elementary available to all from 2018, the National Government as well as the Provincial Government will ensure that the costs of elementary education is maintained at the most affordable level for all children in Madang province. National Government will continue to provide appropriate basic schools supplies whilst Madang Provincial Government will continue to maintain subsidized school fees for all children of Madang Province. Parents will continue to pay their part of the children's school fees and also contribute to project fees as approved by the Provincial Education Board.

Alternative methods for the payment of fees will be introduced through allowing communities to contribute to fees for all of their children. It is recognized that this type of arrangement will largely be of value in the rural areas.

Target: E4.1

Introduce community contributions to schools by 2010.

Table 14 Projected Function Grants by year

	2007	2009	2011	2013	2015	2017
Elementary	299.8	336.5	389.6	442.7	495.7	536.5

The table 14 shows elementary subsidy cost. A very large increase in costs over a period of ten years reflect a rapid increase in enrolment to reach the target and rise in enrolment subsidy allocation per child required to provide basic school supplies. The Madang Provincial Government subsidy component is levied at different amounts per child considering geographical locations of each district over the planned period.

The major costs for elementary education will continue to be the salary costs. The Local-level Governments will contribute toward the achievement of targets in elementary education by providing establishment grants for all new elementary schools as well as annual maintenance grants. These grants are set at the following levels:

Establishment grants	K3000 per class
Maintenance grants	K250 per class

Strategies and Activities:

- ***Formulate a provincial subsidy policy to regulate the Provincial Component of the subsidy.***
 - Liaise with the Provincial Administration for elementary capacity building at the district level and LLGs
 - Encourage a new approach in payment of children's fees as a form of community contribution. (varied between urban & rural settings)
 - Parents will continue to pay fees as set by PEB.
- ***Involve communities in the financing of their schools***
 - Determine the guidelines for community contributions to elementary schools

Responsibilities

Education will be a shared responsibility between stakeholders who are very important key players to the development and quality of education in the Province.

Communities will be responsible for the:

- ensuring that all Children in their Community enroll and attend school.
- provision of infrastructure and maintenance of the school.
- active participation in P&C meeting and activities.
- recommendation of teachers for training and appraisal.

School is responsible for the:

- completion of the school planner.
- planning for infrastructure requirements and close consultation with the ward member.
- development of locally based curriculum support materials and the implementation of a locally based curriculum.

LLGs are responsible for the:

- budgeting for maintenance and establishment grants for all new elementary schools.
- budget for training and in-service of elementary school teachers Programs .

District is responsible for the:

- completion and endorsement of District education plans and implementation schedules.
- liaising with LLGs to ensure budget provision is made for establishment grants and other associated activities.
- DEAs to closely monitor and establish closer working relationship with district elementary Trainers and district administration.

Province is responsible for the:

- completion and endorsement of Provincial education plan.
- initiating the drafting and completion of Provincial Education Policies.
- regulation and allocate elementary establishment and Teacher requirements between districts.
- appointment of teachers

National is responsible for the:

- payment of teachers salaries.
- training of elementary school teachers.
- Curriculum development and development of orthographies.
- provision of supervisory services.
- provision of opportunities for the professional development of teachers.
- allocation of new classes for each provinces.
- provision and distribution of basic school supplies.
- providing technical assistance in areas of Planning, Management and legal matters.

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Ten Year Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in the Elementary section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Elementary education											
Minor outcome E1											
Establish and maintain a sufficient number of schools in the district.											
Establish District Plans for the implementation of Elementary education.											
Determine the number of schools to be established annually for each district.											
Develop guidelines for communities and local level Government to use for the establishments of elementary schools.											
Conduct survey to identify new elementary school establishments in the district and LLG areas.											
Complete all elementary clusters for primary schools for implementation process.											
Complete necessary forms for registrations of schools and teachers.											
Conduct annual review of elementary school structures based upon student enrolment.											
Develop and standardized building plans for elementary classrooms and other buildings.											
Form committee to include LLGs and other stakeholders to determine designs.											
Encourage schools to embark on a child friendly programs and approaches.											
Conduct awareness on the importance of schooling, especially the importance of girls' education.											
Minor outcome E2											
Support the formation and define the role of district Curriculum Advisory Committees.											
Provide support for elementary schools in the development and use of relevant community based support materials.											
Develop, produce and distribute relevant support materials for all subjects at the elementary level.											

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Support the establishments of District LAMP centers in the districts.											
Provide the support for material costing and equipment for the district Lamp centers.											
Provide the technical support for the use and management of the district LAMP centers.											
Liaise with Non-government organizations for the development of orthographies in the districts.											
Provide support for the development of locally based support material in the districts.											
Minor outcome E3											
To ensure sufficient teachers are trained for elementary schools.											
Liaise with PNGEI for the approval and training of the required number of Trainers.											
Assist Madang Teachers College Administration to Finalize selection criteria for selecting elementary Teacher for training beginning 2010.											
Provide professional development opportunities for all elementary teachers											
Produce a Provincial In-service Policy to strengthen the current Teacher Training and in-service program.											
Provided leadership and management training for elementary school site leaders.											
Liaise with the Provincial Administration that the position of the Provincial In-service Coordinator is filled.											
A committee is to be formed through the PEB In-service Sub-Committee to draft the Provincial In-service Plan and policy.											
Liaise with the LLGs for an annual grant to support the Elementary In-service Programs.											
Minor outcome E4											
Formulate a provincial subsidy policy to regulate the Provincial Component of the subsidy.											
Liaise with the Provincial Administration for the elementary capacity building at the district level and LLGs											
Encourage a new approach in payment of children's fees as a form of community contribution. (varied between urban & rural settings)											
Parents will continue to pay fees as set by PEB.											
Involve communities in the financing of their schools											
Determine the guidelines for community contributions to elementary schools											

Elementary

Performance Area: Access		
Minor Outcome	Target	Measure(s)
E1 Elementary schools established at the community level in order that all children in the Province enroll at the age of six years.	That all six year old children in Madang will enter the elementary prep grade by 2018	- Total number of children enrolled. - Total number of six year old children
	An average of 45 elementary Preparatory classes established each year until 2018	Total number of elementary preparatory classes

Performance Area: Quality Curriculum and Monitoring		
Minor Outcome	Target	Measure(s)
E2 A relevant elementary curriculum is developed, implemented and monitored.	The District Elementary Curriculum Advisory Committee be established by 2011	No. of books or materials produced.
	The District LAMP center be established in all districts by 2018	No. of LAMP centers established
	Relevant Locally based support materials are produced in all districts by 2018	Committee established
	All BOM to contribute to teachers appraisals by 2010	No. of BOMs contributing to teacher appraisal

Performance Area: Quality Teacher Education and Training		
Minor Outcome	Target	Measure(s)
E3 Sufficient number of appropriately trained and qualified teachers available for all elementary schools by 2018	163 new elementary teachers to be enrolled in the elementary teacher training program each year	No. of teachers enrolled
	Fourteen Elementary Trainers to be trained for the Province by 2010	No. of trainers trained
	Constant in-service program is conducted every year to upgrade teaching effectiveness in all elementary school in the Province commencing in 2008	In service program conducted
	Produce a Provincial In-service Policy to strengthen the current Teacher Training and in-service program by 2008.	Policy produced

Performance Area: Quality Management		
Minor Outcome	Target	Measure(s)
E4. Elementary Education is cost effective and affordable by Parents and Government	Introduce community contributions to schools by 2009	Community contributions developed

PRIMARY EDUCATION

Definition

Primary Education begins at grade three and finishes at grade eight and caters for the nine to fourteen year age group. Lower Primary comprises grade 3-5 and upper Primary grade 6-8.

Access

There are currently 204 Primary schools established in the province with 148 being Topped-up and offering a full primary education. Fifty six schools remained and yet to gain their first grade 7 classes. They have basically; bi-annual or tri-annual intakes as the kind of enrolment determine their primary status. Furthermore, they still have yet to phase -out grades 1 and two classes. In order that this is done, elementary schools will have to be established as well as training of teachers to take on enrolment at that level.

There are a total of 1307 teachers teaching more than 45,000 students. This number is expected to increase over the plan period due to the corresponding increased enrolment in elementary schools. The current rate of adding the upper grades in the province shows variations within districts. This need to be improved, however, the current limitations is caused by TSC's strict regulations over creation and abolishing of positions.

Schools in remote areas continued to face teacher shortage yearly leading to closure of schools. In some cases teachers refuse to take up teaching positions due to isolation of the schools and cost factors. There are cases of poor infrastructure and poor community relationship. Three least developed districts of the province have continued to experience staff shortage annually. Recruitment initiatives for teachers into these areas lack funding and initiative for local teachers is an option available for these areas. Request for new school establishments are being addressed through the establishment of Elementary component, which will developed into full primary school. Established Elementary schools further from the Primary schools will need to be given full primary status as a bridge into Primary level. Attrition rate is currently at 7 percent and the province relies that school fees is the main obstacle. Average class size will continue to be 40 per class from grades 3 to 8.

Grade 8 examinations will continue with the current policy guidelines. The initiative of taking on board grade 9 and 10 on to Primary schools will need more consultations on policy guidelines prior to implementation. However, expansion within the existing secondary structure in the province will be a cheaper approach and can be seen as a way forward in increasing access.

The tables below shows the situation in recent years with regard to the status of schools, enrolment and staffing.

Table 15 Current status per District.

	Bogia	Madang	M/Ramu	Sumkar	Raikos	U/Bundi	Total
No.of schools offering Gr 7 and 8	32	32	11	34	22	17	148
No. without Gr 7 and 8	17	2	15	3	15	4	56
TOTAL	49	34	26	37	37	21	204

Table 16 Student Enrolment by Grade and gender, 2000 to 2007.

		2000	2001	2002	2003	2004	2005	2006	2007
Grade 1	Male	3908	3307	2724	1669	2328	2525	2301	2839
	Female	3035	2763	2337	1360	1835	1989	1648	2100
	Total	6943	6070	5061	3029	4163	4514	3913	4939
Grade 2	Male	3787	3329	2726	1668	2434	2242	2116	2237
	Female	2942	2662	2051	1365	1850	1697	1646	1927
	Total	6729	5991	4777	3033	4284	3939	3761	4164
Grade 3	Male	4130	4402	4139	2338	4548	4693	4571	4118
	Female	3444	3750	3398	1755	3636	3633	3699	3377
	Total	7574	8152	7537	4093	8184	8326	8270	7495
Grade 4	Male	3773	3855	3811	2060	4277	4297	4189	3868
	Female	2950	3126	3160	1744	3349	3286	3261	3082
	Total	6723	6981	6971	3804	7626	7583	7450	6950
Grade 5	Male	3079	3337	3466	1867	3758	3871	3550	3148
	Female	2460	2713	2720	1524	3099	3141	2761	2492
	Total	5539	6050	6186	3391	6857	7012	6284	5640
Grade 6	Male	2678	2856	2849	1553	3168	3255	3547	3214
	Female	2102	2286	2313	1265	2617	2601	2561	2356
	Total	4780	5142	5162	2818	5785	5856	6108	5570
Grade 7	Male	1387	1677	1891	848	2393	2710	3230	2911
	Female	1145	1276	1541	659	1944	2133	2354	2189
	Total	2532	2953	3432	1507	4337	4843	5584	5100
Grade 8	Male	1115	1347	1443	354	1795	1928	2822	2451
	Female	861	1056	1097	244	1323	1438	2096	1891
	Total	1976	2403	2540	598	3118	3356	4918	4342
Total	Male	23857	24110	23049	12357	24701	25511	26325	19710
	Female	18939	19632	18617	9916	19653	19918	20026	15387
	Total	42796	43742	41666	22273	44354	45429	46351	35097
%age female		44.3%	44.9%	44.7%	44.5%	44.3%	44.8%	43.2%	43.8%

The rapid increase in places for Grade 7 students in the primary schools has meant that the transition rate from Grade 6 to 7 has increased accordingly. Retention continues to be an enormous problem with many children dropping out of school before Grade 6. The figures for the last few cohorts are shown in the table below.

Quality Curriculum and Monitoring

The new upper primary curriculum and materials has been received and distributed to all schools in the Province. The Curriculum Reform Implementation Program in the province needs to be well coordinated with a closer working relationship with all Provincial Education officers. The current relationship with the Inspectors is too remote for the provincial effort to effectively monitor the progress in the implementation of the new curriculum in the Province. Many schools attain primary school status without full resourcing of the appropriate curriculum materials. Resources materials should be a condition before any school attains primary school status. Monitoring of curriculum implementation in the classrooms requires a sound understanding of the upper grade co-ordinators and headmaster to provide sound advice and assistance to the translations of the contents. There is a lot of concern over the teaching of the new syllabus. New ways of teaching and learning, the lack of local language speaking teachers and lack of articulation of curriculum content remains a concern in bridging program from local vernacular language to English at grade three. School visits by inspectors to many schools are irregular due to financial constraints, poor road conditions and accessibility. The outcome based curriculum is designed to accommodate skills training to be learnt in primary schools.

Quality Teacher Education and Training

The DEPI program arrangements with the Madang Teachers College have come to a stop and this will need to be revisited. Clear directions from Teacher Education Division are required to help provinces to work closely with teachers college to train the number of teachers required under this program. Madang has yet a good number of teachers with certificates to undergo DEPI Program to confidently teach and interpret the new Outcome based Curriculum for both Lower and Upper Primary school. The Office of the Provincial In-service Coordinator is vacant and requires a full time person on this position. On the job training in schools is ineffective. Teachers in primary schools will be encouraged to teach and implement making a living syllabus to all primary students and this in line with current curriculum policy. More incentives are given to primary schools to implement the making a-learning or trade skills. All primary schools must be seen to take on board self reliance initiatives by 2012. By the end of the plan period negotiations and consultations will be made between the department of education and TSC in payment of teachers salaries based on their qualification. By the end of plan period schools will be encouraged to take on board IT programs through one lab top per child initiative of the department of education and other stakeholders. Teachers will be required to be trained on IT through internal or external study programs.

Management

Management issues in the Province are seen in several perspectives. Management of the overall school operation is one area, while effective management of the school curriculum implementation is another. Much concern is over the later as most Headmasters lack sound abilities to effectively manage the school's curriculum implementation. The current out-come based curriculum being taught in school is creating much concern with the teachers as most are not familiar with its implementation. Headmasters and senior teachers' in-charge of upper grade co-ordination lack the basic skills in its servicing to fellow teachers. In-service and resources are inadequately supplied to schools in the Province, making it all the more difficult for interpretation and implementation of the new reform curriculum.

Funding is subject to the resourcing of the above areas with the end result being quality education with high academic standard at the Primary school level. Emphasis on greater teaching output in terms of standards is a priority area for the Province. Funding is a major area of concern in most schools in the province. Parents have declined in their component of the school fees resulting in the province loosing out in millions in uncollected fees. Schools subsidy policies need to be clearly redefined for the National, Provincial and the Parental. Confusion still persists over the percentage each is to pay, resulting in schools overcharging parents in some areas. Concern over delays in the release of school subsidies from both the National and Provincial Government had serious implications on the management of the school.

There is a need to revisit the TSC appointment policy on teacher appointment and tenureship by encouraging negotiations and consultations between Madang Provincial Administration, the education department and TSC to have the teachers appointed to positions longer than tenure period.

The Plan

Major Out come

All children have an opportunity to complete full, quality primary education for six year to grade 8.

Access

Minor Outcome P.1

Sufficient Primary school classes established to achieve access and retention Targets.

The current number of primary schools will be further boosted to cater for access to all children of Madang province. The enrolment will increase sharply due to increases at the elementary level. Grade 1 and 2 will be phased out by 2012.

Table 17 Projected Primary school enrolment by selected years, 2007 to 2017

	2007	2009	2011	2013	2015	2017
Grade 1	3771	2829	1887	945	3	0
Grade 2	2989	3069	2193	1317	441	0
Grade 3	7211	10796	11401	13109	14817	16525
Grade 4	6475	8658	9809	11397	12985	14574
Grade 5	5386	6237	9338	9861	11338	12815
Grade 6	5376	5600	7488	8483	9857	11231
Grade 7	4995	4658	5394	8076	8528	9806
Grade 8	4298	4650	4844	6476	7337	8526
	40501	46497	52353	59664	65307	73476

The approved class size is 40, which will determine the number of teachers appointed to the schools.

Table 18 New Grade 7 classes required, by selected years, 2007 to 2017

	2007	2009	2011	2013	2015	2017
New Gr.7	0	9	5	28	16	16

In order that every children in Madang Province obtain Basic Education services, a total of 18 new schools be established over the Planned period,. This will be distributed to the three less developed districts to maintain an even distribution of education services within the province. It is anticipated that by 2015, all nine year population in the Province will be catered for entry into Primary schools in the Province.

The implementation schedules for the introduction of primary schools in the province will be done by the district administrations. These will form a key part of the District Education Plan and will be based upon quotas to be determined by the Provincial Education Board.

Target: P1.1

District education Plan to be developed for districts to guide the planning of school establishments in the districts by 2009

Teacher allocation will be based upon 40 students as an average class size. Multi-grade teaching will be employed in areas affected by low enrolments and staff shortage. Remuneration for multi-grade teaching will be done by NDOE upon the approval of the Provincial Education board. A teacher to class ratio in grade 7 and 8 will be reduced to allow for 1 x teacher per class. This will result in a reduction of about 120 teachers to be re-deployed to remote areas.

Table 19 Primary school staffing by selected years, 2007 to 2017

	2007	2009	2011	2013	2015	2017
Grade 1	85	71	47	24	24	0
Grade 2	86	83	59	35	12	0
Grade 3	180	262	270	302	332	361
Grade 4	162	229	253	286	317	347
Grade 5	135	180	262	270	302	332
Grade 6	134	162	229	253	286	317
Grade 7/8	125	122	131	181	192	216
	907	1110	1251	1350	1441	1573

The problems being faced by remote rural communities will be addressed and all schools will be staffed according to an agreed formula set by TSC. The Province as well as NDOE will work on strategies to attract teachers to serve in remote areas. The Province will address these incentives through strategies such as Disadvantage allowance, In-service priorities, Multi-grade allowances, Responsibilities allowance and Promotional opportunities.

The Provincial Government subsidized school fee component will continue over the planned period with emphasis varies from time to time. The current emphasis on school Basic materials may change to Curriculum and text books for students learning. School infrastructure needs, particularly in identified central schools, may take on donor support through project proposal initiatives being undertaken by the Provincial Education Branch. Other Projects are in line for the purpose of making remote schools attractive for teachers to take up teaching positions. Projects undertaken so far include – Satellite Communication, Schools infrastructure development Program, Solar Electrification, Child friendly school, Text Books Supplies, etc...

Rural communities will be encouraged to pay school fees in a form of a Community contribution as well as in kind, a new approach undertaken by the province. This strategy will relieve many parents and bring out a community spirit of future investment in their young children.

Strategies and Activities:

- **Grant Primary status to Elementary schools furthers from their receiving Primary schools.**
 - Establish new schools in communities where no schools are in existence, beginning with Elementary status and later develop into primary schools.
 - Give Primary status to Community schools that have not yet acquired top-up status.
 - Complete phasing-out of grades 1 and 2 in Primary school by 2009.
 - Identify locations to establish new schools.
 - Fill in appropriate forms for registration of the schools and create Positions for teacher placements.
 - Procure teaching and learning materials for the schools.
 - Appoint teachers to these schools.
- **Liaise with Teachers College for teachers' recruitment and deployment.**
 - In-service Training be supported, particularly for grade three Bridging Program and top-up classes.
 - Conduct finance Management courses for headmasters.
- **Exchange Training programs with other external institutions for academic and skill development**
 - Primary teachers to exchange training program with other external institutions
 - Computer literacy and internet lessons be taught in schools
 - Teachers and students to be computer literate

- School infrastructure development be encouraged in schools for better learning environment
- ***Encourage parents to invest in children education***
 - Payment of school fees be encouraged in kind.
 - Payment of School fees be make through Community based Contributions rather than becoming a parental burden.
 - Provincial and National Government will continue to pay school subsidies to subsidize the full cost of education.
 - School infrastructure maintenance and developments will be through greater community involvement and LLG's support funding.

Minor Outcome P2

Quality Curriculum & Monitoring

All children have an opportunity to complete full, quality Primary education for six year to grade 8.

The Upper and lower Primary reform curriculum is the responsibility of the NDOE to ensure that when completed are supplied to schools in the Province. The province will work closely in the disbursement of these materials and ensure all schools receive their portion. Texts books will be supplied by NDOE while the provision for other supplementary materials will be met by the Province.

Target: P2.1

NDOE to develop relevant curriculum and see to its implementation and monitoring process in the Province in 2008

The province is much concerned about the state of libraries in schools. School Libraries are important as they make the school curriculum complete. They provide a supportive venue for students and teachers learning through readings and research work to enhance their learning and information skills. The Province acknowledges the crucial role libraries play in education and will encourage schools to develop their libraries and stock them with materials that both support and complement the curriculum.

Target: P2.2

School library facilities are established in schools by 2014.

Standard monitoring will be strengthened through annual budgetary support by the province so that regular visits are made to schools for the monitoring and assessment of the curriculum implementation at the school level. Head teachers and the communities will be empowered to monitor performances and appraisals of teachers in the discharging of their responsibilities and will allow inspectors to take on much more advisory role. Concern raised during the consultative process revealed significant need for vigorous in-service on the teaching of the new reform curriculum in schools.

Target: P2.3

Regulate locally based Cluster In-service Training Programs and Workshops for Teachers

The consultation process undertaken by the Province indicated concerns raised for more practical skills oriented programs to be taught at schools, particularly at the upper Primary level. The Provincial will work on policies to encourage schools to undertake projects which can compliment skills being taught at schools through the new outcome based syllabus. The Province will revisit the

previous SSCEP principals to have it applied to upper Primary in the Province. Principles taught at schools are not translated practically by students at their local communities.

Strategies and Activities:

- ***School library facilities are established in schools by 2014.***
 - Liaise with NGO's and other organizations for supply of library books to schools.
 - A survey to be conducted on status of school's storage facilities
 - Assist with submission to LLGs and District Budget Priority Committee for funding support for upgrading of library facilities.
- ***Closer supervision and monitoring the implementation of the curriculum***
 - Budgetary assistance be secured annually for Inspectors operational costs.
 - Regulate locally based In-service Training Programs and workshops for Teachers.
 - All PIST week be scheduled for In-service training programs in the district level.
 - Provide funding support for in service and workshops on curriculum implementation programs.
- ***Introduction of skills related Projects in upper Primary grades.***
 - Liaise with communities and schools for the introduction of projects related to skills being taught and learnt at schools.
- ***Make provision for child friendly school concept to be adopted and expanded to stimulate students learning environment.***
 - Conduct awareness to communities for the benefits of the child friendly school program.
 - Conduct workshops for teachers on child friendly school program.

Minor Outcome P3

Quality Teacher Education & Training

Sufficient and appropriately trained and qualified teachers prepared for Primary schooling.

The Province will embark on an arrangement with Madang Teachers college for training of teachers to meet the shortages of teachers in the Province. An MOU will be developed between NDOE, Teacher Education Division and the Province for the training of teachers for Madang Province under this arrangement. DEPI program will be strengthened and continued with Madang Teachers College, University of Goroka and DWU for teachers with Teaching certificate and time frame extended to 2010. All teachers in Primary schools are required to hold a Diploma status.

Target: P3.1

By 2010 all Primary Teachers will have a diploma qualification and be equipped to teach the reform curriculum.

Multi-grade teaching will continue to be employed to counter teacher shortages in remote schools. Support for ongoing in-service is required and the Province will need to provide budgetary assistance yearly to cater for this.

Target: P3.2

Remote schools be given Priority in Teacher deployment as of 2010.

Much concern is in rural remote schools where teachers do not take up teaching positions in remote schools. This resulted in parts of the Province lagging behind in distribution of education services in

the Province. Results in Student Performances in 2004 and 2005 Examinations show evidences of lower entry marks for grade 9 selections. Further hindrances occurred with less quota given in selections for Aiome, Raikos and Brahman High Schools from the District clusters, forcing lowering of the cut mark to fill the quotas. The Province has considered special arrangements with NDOE for selected grade ten graduates of local origin to be trained to fill in the shortfalls.

Target: P3.3

Supportive in-service framework be established to strengthen teaching effectiveness in schools by 2010

Professional development programs for Primary school teachers will be conducted at the Provincial level by both Provincial and NDOE and from other external funding sources. Teachers will be encouraged to have a greater input in decisions regarding the implementation of curriculum at the school level. Provision of HIV/AIDS will be made available to all participants at professional development workshops. The Province will work with NDOE to conduct in-service programs to prepare all teachers to teacher the new Primary school curriculum and to deal with acknowledged problems being faced in grade three and beyond. This will include Multi-grade teaching and Bridging at grade three.

Opportunities be given for students in very remote areas who have a grade ten qualification to attend Madang Teachers College. Fifty places will be made available each year and will benefit largely the Raikos, Usino/Bundi, Gama and Middle Ramu Districts. It is anticipated that over the planned period the program will have turned out 500 local teachers who will be deployed on a five year bond to their respective local schools to maintain the school. This arrangement reflects the demand for teachers in the remote schools in the province.

Target: P3.4

Training of 50 local Teachers from remote schools starting 2008 over the next ten years.

The province will support the professional development of primary school teachers through sponsorships for students to complete their diploma and through grants to schools to allow them to carry out in service activities.

Strategies and Activities:

- ***Recruitment initiatives for suitably qualified teachers***
 - Liaise with Teachers colleges around the country.
 - Conduct teacher demand in the Province.
 - Develop Provincial In-service Policy.
 - Conduct Provincial In-service Analysis and In-service Plan.
 - Conduct district and cluster in-services.
 - Establish linkages with Madang Teachers College and the Provincial Division.
 - Develop a MOU for training of Teachers for the Provincial Needs with NDOE and Madang Teachers College and Teacher education Division

Minor Outcome P4

Management

Primary Education is cost effective and affordable for Parents and government.

The School subsidies will continue to rise over the years as enrolments continue to increase towards the Universal Primary Education Targets. Parental contributions will continue as a shared responsibility in the cost of the children's education. This will be in a form of cash or kind and will be determined by the school Board of Management with guideline to be set up by the NDOE and

the Provincial Education Board. Parental contributions will be reviewed annually taking into account the level of subsidies provided by the government.

Schools will be encouraged to embark on self-reliance initiatives in order to reduce the burden on parents. Wherever possible, these activities should be linked to the national curriculum and seen as projects complementing the skills being taught in classes.

Target: P4.1

All schools will have a self reliance project by 2010.

Teachers' salaries will continue to be a major cost factor in education services. Under the new initiative the teachers will be contracted to positions. Teachers leave entitlements will be inclusive to their salaries. Rational use of teachers will be the focus for the Province to pursue over the next few years to maintain a balance in urban and rural remote schools. Reclassification of teaching positions will be subject to 1 class per teacher from elementary prep to grade 8 with a class size of 1 is to 40 (1:40). Vernacular language speakers will be appointed to teach the Bridging classes at grade 3 level and training will be provided for them. Multi-grade teaching will be institutionalized through PEB appointment process based upon realistic enrolment figures.

Strategies and Activities:

- ***Develop and implement a sustainable, affordable and appropriate school fee subsidy policy.***
 - Develop a formula to redistribute Provincial component of the subsidies between the rural and the urban settings.
 - Ascertain realistic and affordable levels of parental contributions.
 - Reduce the burden of school fees on parents through schools undertaking self reliance activities.
 - School fees to be subsidized by the Province government

Make efficient and rational use of teachers.

- Review PEB's appointment procedures to reflect efficient and rational use of teachers.
- Develop and apply a set of criteria for PEB to deploy and allocate teachers to districts and schools.
- Ensure that local language teachers are appointed to grade 3 classes.
- Pursue arrangements with NDOE, Teacher Education Division and Madang Teachers college for training of Teachers
- Teachers leave fares has been the problem and that a change of the policy direction should be encouraged so that leave fares are incorporated into their fortnightly salaries net pays
- Establish 10 years contract agreement between all primary teachers in the province

Responsibilities

Education will be a shared responsibility between stakeholders who are very important key players to the development and quality of education in the Province.

Parents and Community will be responsible for the:

- ensuring that all Children in their Community attend school.
- provision of Infrastructure and maintenance of the school.
- active participation in P&C meeting and activities.
- payment of children's school fees in cash or kind.

School Board of Management will be responsible for the:

- completion of the school plans.
- planning for infrastructure requirements and close consultation with the ward member.
- development of locally based curriculum support materials and the implementation of a locally based curriculum
- playing a role in the appraisal of teachers.

LLGs will be responsible for -

- Budgeting for maintenance and new infrastructure as per plans endorsed.
- Budget for training and in-service programs for teachers.

District Administration will be responsible for the:

- completion and endorsement of District education plans and implementation schedules.
- liaising with LLGs to ensure budget provision is made for maintenance and infrastructure.

Provincial Government will be responsible for the:

- completion and endorsement of Provincial education plan.
- initiate the drafting and completion of Provincial Education Policies.
- requesting TSC for creation and abolishing and reclassifying, and appointment of teachers to positions.
- request for registration of new Primary schools.

National Government will be responsible for the:

- payment of teacher's salaries.
- Pre Services Training of Primary School Teachers.
- Curriculum development
- provision of inspectorial services.
- provision of opportunities for the professional development of teachers.
- allocation of new classes for each province.
- development of policies relating to school subsidies.
- providing technical assistance in areas of Planning, Management and legal Matters.

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Ten Year Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in the primary section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Primary education											
Minor outcome P1											
Grant Primary status to Elementary schools furthers from their receiving Primary schools.											
Establish new schools in communities where no schools are in existence, beginning with Elementary status and later develop into primary schools.											
Give Primary status to Community schools that have not yet acquired top-up status.											
Complete phasing-out of grades 1 and 2 in Primary school by 2010.											
Identify locations to establish new schools.											
Fill in appropriate forms for registration of the schools and create Positions for teacher placements.											
Procure teaching and learning materials for the schools.											
Appoint teachers to these schools											
Liaise with Teachers College for teachers recruitment and deployment.											
In-service Training be supported, particularly for grade three Bridging Program and top-up classes.											
Conduct finance Management courses for headmasters											
Encourage parents to invest in children education											
Payment of school fees be encouraged in kind.											
Payment of School fees be make through Community based Contributions rather than becoming a parental burden.											
Provincial and National Government will continue to pay school subsidies to subsidize the full cost of education.											
School infrastructure maintenance and developments will be through greater community involvement and LLG's support funding.											
Minor outcome P2											
School library facilities are established in schools by 2014.											

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Liaise with NGO's and other organizations for supply of library books to schools.											
A survey to be conducted on status of school's storage facilities											
Assist with submission to LLGs and District Budget Priority Committee for funding support for upgrading of library facilities.											
Closer supervision and monitoring the implementation of the curriculum											
Budgetary assistance be secured annually for Inspectors operational costs.											
Regulate locally based In-service Training Programs and workshops for Teachers.											
All PIST week be scheduled for In service training programs in the district level.											
Provide funding support for in service and workshops on curriculum implementation programs.											
Introduction of skills related Projects in upper Primary grades.											
Liaise with communities and schools for the introduction of projects related to skills being taught and learnt at schools.											
Make provision for child friendly school concept to be adopted and expanded to stimulate students learning environment.											
Conduct awareness to communities for the benefits of the child friendly school program.											
Conduct workshops for teachers on child friendly school program.											
Minor outcome P3											
Recruitment initiatives for suitably qualified teachers											
Liaise with Teachers colleges around the country.											
Conduct teacher demand in the Province.											
Develop Provincial In-service Policy.											
Conduct Provincial In-service Analysis and In-service Plan.											
Conduct district and cluster in-services.											
Establish linkages with Madang Teachers College and the Provincial Division.											
Develop a MOU for training of Teachers for the Provincial Needs with NDOE and Madang Teachers College and Teacher education Division											
Minor outcome P4											
Develop and implement a sustainable, affordable and appropriate school fee subsidy policy.											
Develop a formula to redistribute Provincial component of the subsidies between the rural and the urban settings.											
Ascertain realistic and affordable levels of parental contributions.											
Reduce the burden of school fees on parents through schools undertaking self reliance activities.											
Make efficient and rational use of teachers.											

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Review PEB's appointment procedures to reflect efficient and rational use of teachers.											
Develop and apply a set of criteria for PEB to deploy and allocate teachers to districts and schools.											
Ensure that local language teachers are appointed to grade three classes.											
Pursue arrangements with NDOE, Teacher Education Division and Madang Teachers college for training of Teachers											
Establish 10 years contract agreement between all primary teachers in the province											

Primary

Performance Area: Access		
Minor Outcome	Target	Measure(s)
Sufficient Primary school classes established to achieve access and retention Targets	District education Plan to be developed for districts to guide the planning of school establishments in the districts by 2010.	Development of district education Plan before 2010.

Performance Area: Quality Curriculum and Monitoring		
Minor Outcome	Target	Measure(s)
	School library facilities are established in schools by 2014.	Establishment of school libraries
	Closer supervision and monitoring the implementation of the curriculum	Curriculum implementation is monitored.
	Introduction of skills related Projects in upper Primary grades	Skills are acquired through projects in all schools.
	Make provision for child friendly school concept to be adopted and expanded to stimulate students learning environment.	Child friendly concept firmly established in schools.

Performance Area: Quality Teacher Education and Training		
Minor Outcome	Target	Measure(s)
Sufficient and appropriately trained and qualified teachers prepared for Primary schooling.	By 2015 all Primary Teachers will have a diploma qualification and be equipped to teach the reform curriculum.	All teachers have diploma qualification in the Province.
	Remote schools be given Priority in Teacher deployment as of 2010.	All teaching positions in remote school addressed.
	Supportive in-service framework be established to strengthen teaching effectiveness in schools by 2010	In-service plan in Place.
	Training of 50 local Teachers from remote schools starting 2010 over the next ten years.	Fifty remote local teachers trained every year for the next ten years.

Performance Area: Quality Management		
Minor Outcome	Target	Measure(s)
Primary Education is cost effective and affordable for Parents and government.	All schools will have a self reliance project by 2010.	All schools have established self reliance Projects.

POST PRIMARY EDUCATION

SECONDARY EDUCATION

Definition

Secondary education covers grades 9 to 12, with a lower secondary being grade 9 and 10 and upper secondary, grade 11 and 12.

Situational Analysis

Access

The phasing out of grade 7 and 8 in the Provincial High Schools allowed for enrolments in grades 9 and 10 to increase from 1,270 in 2000 to 1,700 in 2008. Overcrowding is experienced due to the increasing demands for the type of education and bad management decisions, particularly by school administration.

Overall, the transition rate from the two entry points, i.e.- grades 9 and 11, has dropped due to a high number of students competing for places yearly for the number of secondary places available in the province. The 2005 figure of 47 percent transition was transition was maintained in 2006 as a result of the phasing out initiatives instituted by the province. This avenue will be restricted in 2007 and means that the Province will need to resort to other avenues to accommodate the 50 percent requirements for grade 9 places.

The demand for upper secondary places is evident in class sizes exceeding well above the recommended figure set by the province. Much concern over the years has been with Madang students facing discrimination and unwarranted problems in schools outside the Province which deprived them of opportunities of enjoying completion of grade 12 education. The mounting Pressure resulted in Karkar and Brahman taking on board grade 11 classes in 2008 and 2009 respectively. Brahman has been identified to commence life skills program as of 2010. After completing grade 12, students will be awarded a trade certificate and an academic certificate. Students can either enroll into Universities to continue with their academic studies or into technical Institutions like Madang Tech, Vudal Agricultural University and Lae University of Technology.

Whilst the Province is mindful of the increased demand for upper secondary education, it should not allow for compromising of grade 9 places as a means to accommodate the demand. Provision will have to be made for grade nine places before embarking on opening more places for upper secondary classes. Another Technical High School will be established at Usino which will allow for academic and trade programs. It should take in grades 9 and 10 classes.

Life skills together with the academic subject will be taught in High schools and Technical schools in the province. First two primary schools from each district will take on board grades 9 and 10 classes. The life skill program will be introduced to these schools so that the students are taught both academic and life skills respectively. It is anticipated that the program will be expended into all our existing primary schools in the province. Students attending primary schools will continue all the way from grade 3 to grade 10 levels. The grade 8 students will still sit for the grade 8 exams.

The Girl's participation in secondary education has improved. Retention is emerging as a problem at secondary school as a good number of students are dropping out between grade 9 and 10. A certain part of this can be attributed to school fee problems.

Quality Curriculum

Not much change has been seen in the secondary school curriculum since 1990s. The Lower Secondary schools syllabus has been reviewed and introduced to schools in 2008. NDOE has reviewed the lower Secondary syllabus and this has been implemented in 2008. The content of the secondary curriculum is largely academic and where possible, the province will encourage schools to initiate practical programs to compliment the skills learnt. The Province will again revisit the SSCEP ideas to have this concept integrated and reintroduced in our secondary schools. School based projects will be encouraged and tied in with the application of core subject skills.

Projects focused on research skills will also be encouraged largely to prepare student to progress onto universities and beyond. The Province was without a secondary school inspector for two years (2004 and 2005) and much in terms of curriculum implementation and supervision was not monitored. The Provincial MRI however, indicated a slight drop overall. The Secondary curriculum will be improved to accommodate life skills programs. The curriculum should prepare students for both skill development and academic achievements.

Quality Teachers

The Province is embarking on encouraging teachers to take on first degree in education to secure placements in the Province. It will be mandatory for Malala and Tusbab secondary to take on only first degrees. Overseas recruitment in the field of Science, particularly in Chemistry and Biology, has been ongoing in Tusbab. This will be phased out and be localized. Training under mentorship arrangement will secure when the program wind down. Demand for special skills in particular, the enrichment courses in the upper secondary, has prompted the province to employ teachers without teaching qualifications. These teachers will undergo Post graduate diploma studies in education (PGDE) at University of Goroka. Teachers will be on contract with the Provincial Government through Education Division to teach in schools for 10 years. It is a change from annual appointments and 3 years (tenure) appointments. This arrangement is the Provincial Government plan initiative to cut down costs in annual teachers' deployment. After 10 years teachers can be moved depending on situations and other administrative arrangements.

Management

The six lower secondary schools in the Province have successfully phased out grade 7 and 8 classes in 2005. The demand for grade 9 places has triggered this initiative and in turn, is making way for Brahman to take on an Agro-Tech Secondary status. Preparations have been under way since 2004 for this turn and NDOE's endorsement will be pursued. Donor assistance will be the focus for providing financial support toward the upgrading of facilities, infrastructures, Training of personnel and technical expertise for this unique skill driven program.

Pressure for Karkar High school in the Sumkar District to take on grade 11 and 12 classes has led the Community to take on the responsibility and onus on themselves to work on infrastructure developments in school as part of the overall preparation. The decision over the secondary status of the school will depend on their efforts to put the necessary infrastructure in place. Karkar was the fourth Secondary school after Tusbab and Malala.

The Plan

Major Out come

A Relevant, affordable and quality Secondary Education provided to selected grade 8 and 10 graduates.

Minor Outcome S1

Access

An appropriate number of well-equipped and resourced secondary schools established within the Budget to provide a quality education.

The Madang Provincial Government's priority agrees with the national transitional rate targets for grade 9 and 11. Options immediately available will be pursued whilst long term arrangement will be pursued through the Provincial Executive Council. A Secondary school expansion plan will be put in place to provide all options available within the province. This plan will include expansion of existing schools, integration of provincial institutions and Building of new schools. The current Matriculation study programs available in the province with Distance Education, University centers and the private providers will be visited to cater for demand in the type of education. The previous Provincial Governments decisions for Transgogol High School and Sumgilbar High School will be pursued at the same time. It is the intention of the Provincial Government to establish two secondary schools per district in the province.

Target: S1.1

Secondary School expansion Plan to be put in place in 2009

The above initiatives are necessary to increases more access for the children of Madang Province to pursue further educational opportunities available to them. The current capacity is inadequate and as can be seen in the table below, avenue will be pursued to accommodate the anticipated increases.

Table 20 Projected Secondary school enrolment by selected years, 2007 to 2017.

	2007	2009	2011	2013	2015	2017
Grade 9	1724	2323	2325	2508	3755	3966
Grade 10	1203	1999	2162	2252	3011	3493
Grade 11	344	401	540	541	583	873
Grade 12	305	344	500	541	563	753
Total	3576	5066	5527	5842	7913	9084

The projected grade 9 enrolment in 2007 will require an additional 6 classes. The table below shows secondary school classes that will be required over the years to 2018. (Also refer to attachment no. at the back page)

Table 21 Secondary school transition rates, selected years, 2007 to 2017.

	2007	2009	2011	2013	2015	2017
Grade 8 to 9	0.0%	50.0%	53.7%	50.0%	50.0%	50.0%
Grade 10 to 11	0.0%	25.0%	25.0%	25.0%	25.0%	25.0%

The Provincial education Office will work closely with all agencies in order to provide the number of places required. The following options to be considered will include a feasibility study to determine costs for the purpose of informing the Provincial Government on the projects.

Strategies and Activities:

- ***Establish and maintain a sufficient number of Secondary school.***
 - Complete provincial plans for secondary expansion for the province.
 - Work out complete cost of each options provided in the Plan.
 - Circulate copies with submission to relevant authorities including the Provincial Government.
 - Make all venues open to the Provincial Government to endorse.
- ***Review procedures for approving the expansion of secondary schools.***
 - Maintain strict compliance to required standards for granting secondary status.
 - Determine the number of new classes required on an annual basis.
 - Standardize and provide equal opportunities to all district to have access to maybe two secondary schools each district
- ***Primary schools to take in Grade 9 and 10***
 - Identify primary schools to take on board grades 9 and 10 with TVET program inclusive
 - Two schools will take in Global Education Partnership program immediately
 - The TVET program to be incorporated into the school curriculum and will be certified with both academic and trade certificates
 - Grade 10 students will continue to TVET technical secondary schools

Minor Outcome S2

Quality Curriculum & Monitoring

A relevant secondary curriculum is developed implemented and monitored.

The present secondary school curriculum is largely academic. A new curriculum is being developed as part of the Aus-Aid funded curriculum reform implementation program. It will include more skills development options that will be more appropriate to students for their return to the communities. Schools will have to embark on self reliant projects, which will help reduce costs for their operation. Projects will need to be tied and integrated with the skills learnt or can be a standalone project by itself. The new Secondary curriculum will include life skills for students. This curriculum should equip the students with both academic and trade qualifications.

Target S2.1

All Secondary schools to establish self reliance Projects by 2010.

Linkages with the community and institutions will be encouraged for trained and qualified persons to assist with school projects and skilled based programs. The integration of Madang Technical College Trade Building programs in Secondary school programs is one way to go. Basic skills be encouraged more vigorously at secondary level through Practical skills program. Similar programs in basic skills development in other trade courses are also encouraged. There will be increased emphasis on skills development in the lower secondary curriculum, taking into account the National skills plan – “**Enhancing our future**” and the proposed institutions currently designated for Technical High school.

Assessment, reporting and examination will be reviewed and new procedures implemented to support the reform curriculum.

The increasing social influence amongst young students in school also will be addressed through guidance and counseling services. Stronger emphasis will be placed on growing problems related to student's discipline which has caused a grave concern in the province. Issues on HIV/AIDS, Drug abuse, Family violence and gender equity will be emphasized for young people to see the need for attitude and behavioral changes in the development of the Province and Country as a whole. Training of school-based teacher counselor will be a key strategy. Teacher counselor will provide counseling services to students while performing teaching duties.

Target: S2.2

School-based teacher counselor for counseling services in all secondary schools by 2010.

Involvement of parents in school counseling and students discipline will be pursued to help strengthened the current efforts by teachers at the school level. This initiative will have a significant impact on both student retention and attendance at school.

Locally produced curriculum support materials will be encouraged to link the curriculum implementation. Brahman High school is identified to undertake the Agricultural skilled based program in the move towards an Agriculture Technical Secondary School. Brahman Secondary will also absorb life skills program incorporated into the curriculum to address access and promote academic and trade skills in students learning.

Target: S2.3

Madang Province to ensure greater emphasis on HIV/AIDS, Drug Abuse and Family Violence in schools.

Linkages with the community and institutions will be emphasized for greater utilization of local expertise in impartation of skills, knowledge as well as disciplinary matters. The province will pursue emphasis in all education institution through to secondary that discipline should begin at home and that parents should be brought to play their part through greater awareness and emphasis in PCA, school open days and BOM meetings.

Strategies and Activities:

- ***Monitor and evaluate teaching and learning to enhance standards.***
 - Support inspectorial services for all secondary schools.
 - Ensure to a minimum of three inspectorial visits to each school per year.
- ***Support and strengthen counseling and guidance services and programs in secondary school.***
 - Assist in training of school based counseling and guidance officers.
 - Support the provision of counseling and guidance services in schools by engaging outside organizations and personals.
 - Involve parents to a greater degree in the education of their children.

Minor Outcome S3

Quality Teacher Education & Training

A sufficient number of appropriately trained and qualified teachers and guidance officers prepared for secondary schooling.

The province will continue to seek sufficient qualified and appropriately trained teachers for the Province in various academic and trade skills. While University of Goroka will be the main institution from where the training of teachers would be drawn, other institutions would be considered. Recruitment drives will be maintained annually to the Goroka Campus as well as other tertiary institutions. The Province will pursue a PGDE Program yearly for teachers that were engaged directly.

The number of teacher in the province will increase over the years because of the increase in grade 9 enrolments. All headmasters of Secondary institutions will have to have a first degree as a standard requirement and undergo financial management and leadership training in order to equip them with the capabilities required to manage the institutions and teachers under their care.

Target: S3.1

Province to develop a Provincial Teachers Appointment Policy guidelines by 2010 to ensure qualified teachers are appointed to positions in the Province.

All Secondary schools with upper secondary component will undergo strict teacher appointment process for the purpose of maintaining higher standards expected at that level in the Province. They will be degree holders who have gained a post graduate diploma in education. All Teachers are required to have first degrees in their respective subject areas to secure appointments by the province.

Contract officers will be strictly confined to subject areas most needed by the province. An understudy program is to be maintained over the contract period to ensure that a national officer is trained to occupy the position after the expiration of the contract period. The Province is to ensure monitoring of this training program.

Table 22 Projected secondary school teacher requirements, 2007-2017.

	2007	2009	2011	2013	2015	2017
Lower secondary	0	168	174	185	262	290
Upper secondary	0	32	45	46	49	70
Total	151	200	219	231	311	359
TP ratio	23.7	25.4	25.2	25.3	25.4	25

The major avenue for teachers wishing to upgrade their qualification will be through in-service courses using a mixed mode delivery method. In-service training will be focused on the implementation of the new curriculum. Self-paced unit will be developed by NDOE to support this process. There will continue to be opportunities available for serving teachers without a teaching qualification to gain a post-graduate diploma of education, which will also be offered through the mixed mode delivery method.

Target: S3.2

A Secondary school In-service policy to be developed in 2008.

Secondary school in-service policy will be developed and be supported through funding annually as an emphasis to enhance a higher standard in education.. A variety of modes including school based

to Provincial level will be considered. Teacher demand analysis will be initiated every three years and will be inline with the provincial appointment system which will be reviewed every three years starting 2010. Training and development of teachers is a pre-requisite for promotional positions to be granted by the Province. All appointing authorities including agencies will have to address this area sensitively. Teachers being appointed to positions on denominational boundaries other than meeting standard requirements will be disregarded.

Target: S 3.3

Teacher demand analysis for staff training and development be carried out every three years.

Strategies and Activities:

- ***Provide a number of appropriately trained teachers.***
 - Conduct teacher demand analysis program for the Province.
 - Liaise with University of Goroka for Training program for teachers in the province.
 - Organize and execute teacher recruitment drives for specific subject areas in tertiary institutions.
- ***Provide support for teacher In-service training and development program.***
 - Budget for ongoing In-service training Program.
 - Conduct in-service training courses for Secondary teachers in the Province.
 - Develop courses on key Management areas such as Planning, Financial, Asset Management and Project proposal writing.

Minor Outcome S4

Management -

Secondary education is cost effective and affordable for parents and government.

Parents will continue to pay a percentage of the children's school fees, while government will support with small cash subsidies in a form of a grade 8 graduate incentive scheme. These will take the place of the school subsidies and be of a same value, although there will be no increase in real terms. In light of these secondary schools will be encouraged to become more self-reliant and undertake activities to reduce the burden on parents. These activities should be integrated into the school curriculum wherever possible. Secondary schools in the province will be identified to take on board life skills technical secondary status. These life skills Technical secondary schools will be enrolling grade 10 students from high schools. In 2010 Brahman Secondary has been identified to take on board first life skills program. After completing grade 12 students will be awarded both trade and academic qualification. Those who perform well in academic will be absorbed into Colleges and Universities. Students who do well in skills development will be absorbed into technical institutions and technical universities like Vudal and Unitech.

Target: S4.1

All schools to have self-reliance projects by 2009.

The Madang provincial Government will continue to pay the provincial subsidy component as it is in line with its lists of number one priorities. Education will continue to be the Provincial Governments top priority as it sees Education as a means to a healthy productive population, poverty alleviation, gender equity, economic development a means to fight HIV/Aids in the Province. This support will further make it affordable for parent to met the cost of their children's

school fees and ensure quality education is maintained for their children. A review is required in relation to the distribution of the Provincial subsidies as the initiative will ease the burden on the rural mass where the burden on school fees is hardest felt.

Target: S4.2

The Provincial Government Subsidy distribution be reviewed by 2009

Scholarships will be awarded to talented disadvantaged students to assist in meeting school fees. Following the guideline set by NDOE, the Province will administer the scheme to ensure that no disadvantaged children miss out on this scholarship scheme.

Target: S4.3

A scholarship system implemented by 2012

The Provincial Education Board will continue to deploy and appoint teachers to teaching positions in schools. NDOE will continue to ensure that allocations of teachers to Provinces are maintained at a 1.5 teacher per class. Further need for increase in the number of teachers will be requested by the Province through MPR Review annually. Tusbab and Malala Secondary schools will continue to be the Province's schools of excellence. Policy requirements will be strictly complied with in terms of Teacher qualifications for Secondary schools. The DODL Program being implemented concurrently alongside Upper secondary Programs in Tusbab will be withdrawn and decentralized to a different location to give greater student and teacher access for concentration and excellence in achieving quality output for students.

Target: S4.4

The DODL Program in Tusbab to be Re-located to Education Resource Center in 2010.

Strategies and Activities:

- ***Province to implement an appropriate school fee subsidy policy developed by NDOE.***
 - Administer the scholarship scheme upon guidelines set by NDOE.
 - Develop a more equitable distribution of the Provincial Governments subsidy.
 - Reduce the burden on parents through schools undertaking self-reliance activities.
- ***Province to develop a Provincial Appointment policy to govern appointments of teachers in the Province.***
 - Make efficient and rational use of teachers.
 - Strengthen the role of PEB appointment and Planning sub committees to co-ordinate and monitor position allocations in the province.
 - Establish criteria for allocations of positions to achieve a more equitable distribution of teachers in the Province.
 - Establish a 3 year Review Program on the MPR for the purpose of effective monitoring and co-ordination of positions in the Province.
 - Make appointments to teaching positions in the Province.

Responsibilities:

Education will be a shared responsibility between stakeholders who are very important key players to the development and quality of education in the Province.

Parents and Community will be responsible for the:

- payment of parental contributions
- participating in Parents and citizen activities
- involvement in school counseling and discipline services.

School Board of Governors will be responsible for the:

- recommendation of teachers for appointments
- planning of infrastructure requirements
- promotion of school and community relationship.

Provincial Government will be responsible for the:

- completion and endorsement of provincial education plans.
- maintenance and upgrading of school infrastructures.
- establishment of new school infrastructure.
- creation, abolishing of teaching positions.
- appointment of teachers
- selection of grade nines
- administration of scholarship scheme.
- payment of provincial component of school subsidies.
- sponsorship for teachers training program/ in-services.
- administration of examinations.

National Government will be responsible for the:

- payment of teacher's salaries in an efficient and timely fashion.
- selection of student for grade 11
- pre-determination of criteria for entry into grade 11.
- preparation and administration of schools certificate and higher school certificate Examination.
- pre service training of secondary school teachers.
- Curriculum Development
- Administration of National High schools
- provision of inspectorial services.
- provision of opportunities for teacher Development.
- allocations of teachers to provinces.
- allocation of new grades 11 and 12 classes to each Province.
- development of policies relation to school subsidies and the scholarship program.

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in the Secondary section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District t and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Secondary education											
Minor outcome S1											
Establish and maintain a sufficient number of Secondary school.											
Complete provincial plans for the implementation plan for secondary education.											
Work out complete cost of each options provided in the Plan.											
Circulate copies with submission to relevant authorities including the Provincial Government.											
Make all venues open to the Provincial Government to endorse.											
Review procedures for approving the expansion of secondary schools.											
Maintain strict compliance to required standards for granting secondary status.											
Determine the number of new classes required on an annual basis.											
Minor outcome S2											
Monitor and evaluate teaching and learning to enhance standards.											
Support inspectorial services for all secondary schools.											
Ensure to a minimum of three inspectorial visits to each school per year.											
Support and strengthen counseling and guidance services and programs in secondary school.											
Assist in training of school based counseling and guidance officers.											
Support the provision of counseling and guidance services in schools by engaging outside organizations and personals.											
Involve parents to a greater degree in the education of their children.											
Minor outcome S3											
Provide a number of appropriately											

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
trained teachers.											
Conduct teacher demand analysis program for the Province.											
Liaise with University of Goroka for Training for the teachers in the province.											
Organize and execute teacher recruitment drives for specific subject areas in tertiary institutions.											
Provide support for teacher In-service training and development program.											
Budget for ongoing In-service training Program.											
Conduct in-service training courses for Secondary teachers in the Province.											
Develop courses on key Management areas such as Planning, Financial, Asset Management and Project proposal writing.											
Minor outcome S4											
Province to implement an appropriate school fee subsidy policy developed by NDOE.											
Administer the scholarship scheme upon guidelines set by NDOE.											
Develop a more equitable distribution of the Provincial Governments subsidy.											
Reduce the burden on parents through schools undertaking self reliance activities.											
Province to develop a Provincial Appointment policy to govern appointments of teachers in the Province.											
Make efficient and rational use of teachers.											
Strengthen the role of PEB appointment and Planning sub committees to co-ordinate and monitor position allocations in the province.											
Establish criteria for allocations of positions to achieve a more equitable distribution of teachers in the Province.											
Establish a 3 year Review Program on the MPR for the purpose of effective monitoring and co-ordination of positions in the Province.											
Make appointments to teaching positions in the Province.											

Secondary

Performance Area: Access		
Minor Outcome	Target	Measure(s)
An appropriate number of well-equipped and resourced secondary schools established within the Budget to provide a quality education	Secondary School expansion Plan to be put in place in 2009	The expansion is developed with complete cost estimates

Performance Area: Quality Curriculum and Monitoring		
Minor Outcome	Target	Measure(s)
A relevant secondary curriculum is developed implemented and monitored	All Secondary schools to establish self reliance Projects in schools by 2010	. All schools to have self reliant projects
	School-based teacher counselor for counseling services in all secondary schools by 2010	* All schools to have school-based counselors
	Madang Province to ensure greater emphasis on HIV/AIDS, Drug Abuse and Family Violence in schools	Emphasis is placed on HIV/ AIDS, Drug Abuse and family violence in school

Performance Area: Quality Teacher Education and Training		
Minor Outcome	Target	Measure(s)
A sufficient number of appropriately trained and qualified teachers and guidance officers prepared for secondary schooling.	Province to develop a Provincial Teachers Appointment Policy guidelines by 2010 to ensure qualified teachers are appointed to positions in the Province	Provincial Appointment is completed and implemented
	A Secondary school In-service policy to be developed in 2008	In-service policy is completed and endorsed by PEB.
	Teacher demand analysis for staff training and development be carried out every three years starting 2007	Provincial teacher demand completed for all school for appointment purposes

Performance Area: Quality Management		
Minor Outcome	Target	Measure(s)
Secondary education is cost effective and affordable for parents and government.	All schools to have self-reliance projects by 2010	All schools have self reliance projects established
	The Provincial Government Subsidy distribution be reviewed by 2008	The Provincial Government subsidy is distributed
	A scholarship system implemented by 2008	A scholarship system is implemented
	The DODL Program in Tusbab to be Re-located to Education Resource Center in 2010	Relocation of DODL programs to FODE

- Formatted: Left
- Formatted: Indent: Left: -0.1 cm
- Formatted: Bullets and Numbering

VOCATIONAL EDUCATION

Definition

Technical Vocational education is a skills-orientated education offering primarily to students completing Grade 8, 10 and 12 and the community at large, in a variety of institutions to meet the Rural and Industrial demand in trade areas

Situation Analysis

Access

The education reform process has resulted in a growing number of students exiting following Grade 8 and Grade 10 and 12 education level. There is a growing demand in the Province for these graduates for further training opportunities. In addition there is an increasing awareness of the need for relevant skills for the wider population. The vocational centers are only providing limited provisions for these needs.

There are a number of different types of vocational centers operating in the province. Vocational centers range from large institutions to small centers catering for just only a few students. Talidig vocational secondary school was established in 2000 but proved difficult to implement in a cost and educationally effective manner.

Vocational education has only seen gradual growth in enrolment in recent years during the recent years and any rises in enrolment are often, related to the level of subsidy. The number of students in vocational centers rose by 43% between 1995 and 2003. Of those enrolled, 60% were in Year one (1), 30% were in Year two (2) and the remainder were in Year three (3) or beyond. There has been little significant increase in female enrolment, which was only 26% of the total 2003.

Students entering vocational centers are largely Grade 8 graduate, but there are also those who graduated from Grade 6 and Grade 10. Enrolments in relevant short courses – those with duration of one day to four weeks design for the community – are very low. There are increasing numbers of private providers, largely in urban areas, who are offering programs that are attractive to many students.

The instructor students ratio has remain at about 1: 15 overall, but this hides a wide range of differences. Some of the smaller centers only have a few students for every instructor, while others have unmanageable large numbers of students for each instructor.

Vocational centers are characterized by poor standards of maintenance and a lack of suitable facilities. There has been little support from the provincial and local level governments, who are responsible for infrastructure. However, there are a number of centers that have been well maintained and operate very successfully.

Quality Curriculum and Monitoring

A common curriculum is available to all centers but little consideration is given to the demands of individual communities. There are few links between the centers and other government departments such as Agriculture and Livestock and Community Development, and little use made of potentially beneficial links with private enterprise such as mining, agriculture and fisheries companies.

There is no national accreditation policy in place and individual centers award their certificates. There is no articulation with other programs. A lack of formal recognition and national accreditation has caused some provinces to move to establish vocational secondary schools as they

are sometimes known. Talidig was not approved although the formal secondary curriculum was to be exercise. Despite the Board of Studies endorsement of a curriculum that requires that 60% of the curriculum be devoted to trade areas and 40% on traditional core academic subjects. These have proved difficult to implement in a cost and educationally effective manner.

The curriculum has been revised in seven core trade areas based on competency- based approach. A Skills Training Resource Unit is developing short-term courses to meet the needs of the communities.

In addition to trade courses, a number of centers offering the opportunity for students to take up CODE courses to upgrade their academic qualifications.

A large number of vocational centre instructors do not have formal teaching qualifications. There is little pre-service teacher education offered aside from a three year program in Hospitality and Tourism offered at PNGEI. In addition there is a Post Vocational Technical Clerical and Secretarial course offered at the University of Goroka.

Quality Teacher Education and Training

Trade instructors are required to have five years of trade experience before becoming an instructor. A diploma in Vocational Education and Training has been design to allow those instructors already working in the field to be able to get a teaching qualification through a mixed mode delivery. Unfortunately, there are few instructors enrolling in the course due to the cost of their residential component at the PNGEI. The other components are an agriculture course and further work in their trade areas leading to trade testing qualifications.

Vocational centre inspectors are part of the TVET Division, but have not had adequate resources to visit centers. It remains unclear whether vocational or secondary school inspectors are responsible for inspecting the newly established vocational secondary schools.

Table 23 Vocational centre staffing, 2000 to 2004

Year	2000	2001	2002	2003	2004	2005	2006	2007
Male	27	23	24	33				
Female	10	7	5	6				
Total	37	30	29	39				
Ratio	18.1%	18.7%	44.6%	20.9%				

Management

Provincial vocational centers are considered a low priority by most provincial authorities. These are evident in the allocation of funds to these centers. At the institution level, there is a shortage of entrepreneurial skills. In the past many centers have been able to rely on income generating programs to survive.

Most centers now are becoming increasingly dependent upon cash subsidies provided by the Department of Education and the fees charged to students. Government subsidies are at present provided to all centers, based on enrolment, at the same level as that of the secondary schools. At present the centers are not making use of potentially beneficial links with local business, other governments, education institutions and training providers. The Education Resources Center will be upgraded and the name will be changed to 'Education Leadership Center' (ELC) to allow teachers to undergo short courses and training to become better school leaders through upgrading teacher qualification and training. TVET facilities, the library facilities, FODE center, University Center, IT facilities, auditorium facilities, and other training component facilities will be built with the support from all stakeholders with the aim to improve teacher training and skill upgrading. Education village will also be introduced to have the Education staff and trainers accommodated at the training site.

THE PLAN

Major outcome

A variety of institutions offering competency based and enterprising courses of varying length to students completing primary education and the wider population to gain relevant and appropriate skills to satisfy both person and community demand

Minor outcome V1

Access

An appropriate number of Technical Vocational Institutions providing technical skills training opportunities as well as access for higher educational advancement

There are currently eight conventional vocational centers in the province unequally distributed as per district. During the planned period each district will have at least three junior technical schools and a senior technical school established with emphasis on rationalization and upgrading of courses, institutions and facilities to provide more access to school leavers in the province. Rationalization will commence with the existing vocational centre. Other external education programs will be absorbed to enhance teachers' knowledge and skills in TVET program.

The current establishments suffered from -

- Lack of maintenance of infrastructure, tools, equipment, machines and other necessities.
- Significantly low enrolment
- lack of management capacity
- teachers shortages
- funding limitations
- lack of community and government support

The Province will review and screen the status of all current vocational centers for rationalization and re-registration in 2009. Vocational centers will change status to become technical schools. Each district will have a senior technical school with at least three junior technical school clusters around them.

Table 24 The planned review and rationalization for each institution in the Province.

No	School	District	Year of Start	Year of Reform	Status
1	Talidig	Sumkar	1974	2009	Senior Technical School
2	Bau	Madang	1974	2009	Senior Technical School
3	Danip	Madang	1997	2009	Senior Technical School
4	Ramu Sugar	Usino/Bundi	1985	-	Senior Technical School
5	St. Ann	Madang	1984	2009	Amalgamation /Danip Tech. School
6	Karkar	Sumkar	2005	2009	Senior Technical School
7	Simbai	Middle Ramu	2006	2010	Senior Technical School
8	Daigul	Bogia	2008	2010	Senior Technical School
9	Raikos	Raikos	2009	2011	Senior Technical School
10	Brahman	Usino/Bundi	2010	2014	Technical Secondary

Target: V1.1***Review the roles and status of all Vocational centers in 2009***

The rationalization program will include –

- i. the inception of FODE courses in all junior and senior technical schools and upgrading their status into Technical level.
- ii. the review of demand driven courses targeting the needs of the community at large.
- iii. Amalgamation of smaller centers with introduction of community oriented programs.
- iv. Modularize the trade skill courses for all technical schools

This move will provide the elevation required in the current system and more importantly provide an alternate pathway in trade based streams onto Higher Secondary and University education level. By then the standard competency based training policy guidelines and the TVET qualification framework will have been established to qualify students entering the program and which the province will adopt for implementation. During the planned period it is envisaged that enrolment and support from all stakeholders will grow significantly.

Talidig and Ramu Sugar Vocational Centers will be re-registered in 2010 for a Junior Technical School status and will eventually move into a Senior Technical School status in 2011. By then Bau, Danip, and Simbai will be ready to take on Junior Technical School status. Two new junior technical schools will have to be established in the Bogia and Raikos Districts respectively. The Provincial Government, in consultation with the Department of Education and the National Planning Office will solicit external funding for the upgrading of the technical schools during the planned period.

Target: V1.2***Re-registration of existing vocational centers as either junior or senior technical schools by 2010***

The centers will offer a one to two years program based on community needs and demands. Short courses for adults and youths in the community will also be offered. Linkages between line departments and NGOs will be strengthened through utilization of facilities, Manpower training and programs targeting the demands. The Department of Trade and Industry's Rural technology program and the Department of Community Development program will be consulted as well as other extension programs (e.g. DPI) for integration into the centers community demand driven programs.

Gender equity will be addressed through greater awareness program aiming at encouraging female enrolment through the reform TVET program over the planned period. The students will be encouraged to take on male dominated programs through the provincial selection process where a portion of places will be reserved through the provincial selection process. Secondly, is to development of courses that are more attractive to girls.

Target: V1.3***Provincial Selection policy to be reviewed in 2009***

The current all girls Vocational institutions in the Province will be amalgamated with other institutions to provide the elevation much needed. The Saint Ann Vocational Center, the Lutheran based Baitabag Girls School and Sausi Girls Vocational Centre will be reviewed for amalgamation and possible relocation.

The establishment of a Provincial TVET Development Committee that will be tasked to develop Provincial Trade curriculum as well as monitor the provision of trade courses made available to the wider population in the Province.

Target: V1.4

Province to establish a Provincial TVET Development Committee in 2007

The responsibility for the enrolment of students in full-time courses will rest with the Provincial Education Board through the Provincial selection process with close consultation with the individual school Boards.

Table 25 *Types of Vocational Institutions.*

Name of institution	Intake Targets	Length of course	Type of courses
Conventional Vocational centers	Gr.8 leavers & non school leavers	1-2 years fulltime modularized courses plus FODE courses	Trade Base
Junior Technical Schools	Grade 8 leavers & non school leavers	1-2 years fulltime modularized trade course plus academic courses	70 % Trade base & 30% Academic
Senior Technical Schools	Grade 10 leavers, off loads from junior tech schools & non school leavers	1-2 years fulltime modularized trade course plus FODE courses	specialization component

Technical Schools will run for two years in duration with 30 per cent of time allocated to a distance education studies and the remainder to appropriate and relevant modularized skilled courses. Conventional centers will continue to conduct short courses to cover wider community demands.

Table 26 *Range of program and courses to be offered by conventional centers*

Length and type of program	Intake target group	Type	Accreditation possible	Articulation possible
Two year full-time vocational skills development course	Grade eight up to Two years out of School	Certificate Trade course	Yes	Yes
One week to one month individual and industry driven Modular Block course	Individual and industry	Certificate Trade course	Yes	Yes
One day to three months community demand driven short courses offered in the institutions	Local community	Enrichment Course	No (center based)	No
One day to four weeks community demand driven short courses offered through outreach and community extension activities	Out of school youth In communities	Enrichment Course	No (center based)	No

Short term course develop within all centers will vary in duration, skills content, instructor qualification and expertise and relevant training resources. All vocational schools will offer short term community and industrial driven programs by 2008.

Plans for all community surveys and development of all community demand courses and skills for each center be finalized by 2008. Private providers will be encouraged to provide skills training both in fields of business and trade areas to create competitive atmosphere with our vocational institutions.

Table 27 Vocational centre enrolment selected years, 2007 to 2017

	2007	2009	2011	2013	2015	2017
Year 1	590	778	858	946	946	1149
Year 2	347	255	281	310	310	377
Total	937	1033	1139	1256	1256	1526

Projections as per Talidig Technical School establishment with teacher/student ratio of 1:40 by grade over the planned period.

Table 28 Projected technical schools establishment by district.

District	No. at Present	Senior Technical Schools Required	Junior Technical Schools Required
Madang	3	1	0
Bogia	0	1	3
Sumkar	2	2	2
Raikos	0	1	3
Mid/Ramu	1	1	2
Usino-Bundi	1	1	2
Total	7	7	12

The Province anticipates a total of ten Vocational centers by the end of the plan period. This will be achieved through building on our current capacities as well as establishing new centers in each district.

Strategies and Activities

- **Review the status and roles of all vocational institutions in the province.**
 - Determine the status of all vocational centers in the Province.
 - Up grade Ramu Sugar and Talidig Vocational centers
 - Liaise with NDOE for change of status.
 - Creation of appropriate number of teaching positions.
- **Provincial Selection Policy to be reviewed in 2009.**
 - Ensure PEB's endorsement is secured for the review of the selection Policy.
 - Awareness on gender participation in Provincial TVET Program
- **Province to establish a Provincial TVET Committee in 2007.**
 - Ensure a well represented membership.
 - Liaise with NDOE for the Committee's Terms of references and responsibilities.
 - Establish meeting schedules are in place.

Minor outcome V2

Quality curriculum and monitoring

A quality vocational skills training program provides clients with skills that are relevant and required by the community and industries.

The changes in the curriculum through the establishment of the Provincial TVET Development Committee will reflect the reclassification and re-designation of the vocational institutions. To this end, the curriculum will be reviewed by 2012 that both the informal and formal sector development needs of the province are reflected. This will be done by redirecting the curriculum towards providing appropriate and broadly based skills and knowledge, while at the same time preparing students to continue on to further training where such opportunities exist.

Target: V2.1

The curriculum be reviewed and developed to reflect both formal and non formal sector development needs in the Province in 2012

Secondly is to introduce an alternate pathway for students through upgrading the status of Vocational centers onto Higher education level. Articulation in Trade Courses will be made possible by the standard competency based Training policy guidelines and the TVET qualification framework which should come into place by 2012.

Regardless of the nature of the institutions, the content of all TVET programs will be competency based and enterprise driven as it enhances learning in a practical situation and further strengthen skills for life. It will also help the program to sustain itself. The curriculum development process will be streamlined to respond to different needs.

Target: V2.2

All Programs in TVET institutions will be enterprise driven for self reliance and sustainability by 2012

The type of program offered will be determined during the rationalization process. The full time TVET programs will be for a minimum of one year to two years duration. These courses will be modularized to allow students to attend and complete modules at a time of their choosing. The qualification framework will allow for articulation onto a higher education level and further advancement. New courses that are developed will respond to needs identified in particular communities. Recognition of prior learning will be available once the appropriate policy is developed.

Linkages with line departments and other organizations to harness greater access to demand driven initiatives in terms of training and development of appropriate skills targeting the community at large will be vigorously strengthened. This will be done through consultation with NDOE and other line departments and organizations during the reviewing process of courses for the centers.

The centers will need to review and integrate its role to being a “**Community Skills Resource Center**” and to play a more facilitating role apart from a Teaching role. Utilizing the centers resources and inter-grading the various programs, the center will become a thriving community learning center and a focal point for change and development in the Community.

Community surveys will be conducted within all districts and communities at large to enable appropriate and relevant trade and short course to be develop within all institutions. Trade and short course would then be developed and implemented upon the locality appropriateness. All accredited courses implemented will follow CBT policy guidelines to meet TVET qualification framework.

Target: V2.3

Review and adopt existing short courses from NDOE, line departments and other organizations in 2010

Conventional Vocational Centers will maintain a one to two years modularized courses and offer simultaneous short courses to individuals to meet personal and community needs. Other relevant short courses will also be conducted in the center or as out-reach or extension activities.

Technical schools will offer both formal FODE core subject curriculum with other approved trade skilled courses applicable to the community and industrial needs. The academic component of the program will initially be through distance education mode until such time as a recognized and appropriate academic course is developed. 30% of the school week will be allocated to these academic subjects. In 2012 all vocational curriculum will be reviewed, standardize and rationalized in both conventional centers and technical schools based on the TVET qualification framework curriculum. .

Short courses developed and implemented within and out of the centre will be accredited by individual centers following the provincial policy guidelines. Short course programs produced by the Skills Training Resource Unit will be distributed to all centers and used as a basis for the short courses. The Province will utilize community expertise for some of the community based programs.

Target: V2.4

Province to establish a Provincial Accreditation Policy guidelines for Provincial Based short courses in 2012

Vocational Technical Schools curriculum will not deviate from the formal grade 11 and 12 core curriculum. Elective non core courses such as Hospitality and Tourism, Practical Skills and Agriculture etc will also be implemented concurrently by integration approach. Other short courses will be integrated in the form of income generating project (IGP) towards the student incentive fund when they leave school. The similar IGP approach will be applied to conventional centers and the formal secondary schools for post grade 10. The current KAB and SYB syllabus will be compulsory trade subject in all vocational institutions.

Strategies and activities

- ***Review curriculum in vocational schools to reflect both formal and non formal sectors in the Province.***
 - .Carry out need analysis survey within the communities.
 - Adapt existing full time courses for minimum one to two year duration.
 - Support the production of the locally-based curriculum.
 - Conduct community based programs in and out of school.
 - Liaise with NDOE for appropriate course materials
 - Provide more training on entrepreneurship
 - Adapt existing short courses from NDOE, line departments and other organization.

Minor Outcome V3**Quality teacher education and training*****The provision of sufficient numbers of appropriately trained and qualified vocational centre instructors and managers***

One of the major setbacks in our current Vocational institutions is lack of adequate, qualified number of instructors and Managers. Over the Planned period, the Province intends to address this issue and encourage more skillful and entrepreneurial Managers and instructors. The successful

implementation of a broad based vocational course will require programs that will prepare an appropriate number of qualified teachers and supervisors who are proactive and have entrepreneurial and managerial skills. Teachers will be trained through TVET training institute in the province through training facilities at the Education Leadership Center (ELC).

The Province will embark also on the redundancy program which will take effect in line with this plan and new recruits in place with teacher training qualifications obtained from PNGEI or other training institute with official accreditation. The province will secure training places for five teachers per year for a Diploma of Vocational Education and Training, currently offered by the Papua New Guinea Education Institute. Teachers in TVET schools will also be introduced to take on board exchange training programs with other external institutions to prepare them to teach TVET curriculum in schools.

Target: V3.1

The Province to secure training Places with PNGEI, DWU and UOG for training of Vocational Teachers under the DoVET program in 2009.

Furthermore initiatives the Province will undertake is to embark on closer dialogue with NDOE to turn this program into distant mode using a similar model to that of the elementary teacher education Program. Madang Teachers College can be utilized to adopt this mode of training which will see the cost of Vocational Teacher education cut to benefit the Province. It is anticipated that under this arrangement, can the Province access the required number of teachers and instructors for its program.

Table 29 Vocational centre staff requirements, 2007 to 2017 (selected years)

	2007	2009	2011	2013	2015	2017
Staffing Requirement	52	57	63	70	70	85

A policy guideline is to be developed to accommodate selection of instructors into vocational institutions. Vocational instructors and teachers must at least have five years of field experience in his/her trade areas before qualified as a teacher. It is required for them to hold teaching qualification as well. Further recruitment to meet the province demand of 45 teachers in 2010 will be through liaisons with UOG, PNGEI and DWU programs.

Target: V3.2

By 2012 all instructors will have a teaching qualification with five years of field experience in their trade.

A skills audit will be carried out for all institutions staff and in the communities to identify the resources available to deliver a wide range of short courses. There will be courses that can be taught by local people with demonstrate skills. The center can also facilitate for various short courses from line departments such as DPI, Community Development and Trade & Industry.

The capacity of short course center managers and teachers will be enhanced through further entrepreneurial and management training. Ongoing training and in-service programs will be strengthened through funding support made available by the Provincial Government each year.

The province will support the professional development of vocational centre infrastructures through provision of support to vocational centers for in service activities.

Strategies and Activities:

- **Province to secure training Places with PNGEI for training of Vocational teachers under the DoVET program.**
 - Liaise with PNGEI for training places of five per year over the planned period.
 - Provide yearly funding support for training program.
 - Establish selection criteria.
 - Establish a Provincial policy on teacher training and recruitment.
- **All instructors to have teaching qualification with five years of field experience in their trade.**
 - Provide professional development opportunities for vocational instructors.
 - Conduct skills audit of instructors and Managers
 - Identify, develop and deliver courses to include entrepreneurial and adult education skills.

Minor Outcome V4

Management

A vocational education system that is both cost-effective for the government and affordable for all.

The Board of Management guidelines will be reviewed to effect sound management and transparent management of finance and assets as a reflector of good governance.

The role of vocational centre coordinator will be reviewed in 2010 in order that this officer, play a greater role in the promotion of vocational education in the Province. This could effect the appointment, management and discipline of vocational education instructors.

The system of vocational institutions will be reviewed and the feasibility of introducing the Grade 8 incentive scheme be investigated. The scheme is design to encourage competitions and a shift towards a need driven system and will only be available to Grade 8 graduates.

All vocational staff duty statements will be reviewed and amended to reflect the need for innovative, business minded leadership as well as enterprise education.

The number of full time teachers in vocational centers will be based upon the number of full-time equivalent students at the rate of 1:18 students. Additional positions will only be approved in accordance with strict criteria as determined by a position allocation committee.

Target: V4.1

A review of all teachers in conventional vocational schools and technical schools based upon the full time equivalent students in 2010.

Provisions will be made for the employment of seasonal staff, where appropriate, to allow the centers flexibility to be able to offer a wide range of courses. Provincial government will be expected to support the infrastructure development and maintenance of the centers. Centers will be required by undertaking self-reliance activities.

Strategies and activities:

- **Develop and implement a sustainable, affordable and appropriate school fee policy.**
 - Conduct a review to ascertain the viability of a Grade 8 graduate Incentive Scheme allowing them to enroll at any approves institutions.
 - Determine on an annual basis, the cost of delivering vocational education programs.

- ***Promote the principles of good governance in the administration of vocational institutions.***
 - .Develop appropriate systems for financial, inventory and asset management.
 - Review guidelines for vocational centre Board of Management.
 - Strengthen the role of the vocational centre coordinator in the province.
 - Develop institutional plans.

Responsibilities

Parents and the community will be responsible for the:

- . payment of parental contribution
- . participating in parents and citizen activities

Center Board of Management will be responsible for the:

- . recommendations for instructors appointment
- . planning for infrastructure requirements
- . administration of short courses

Provincial government will be responsible for the:

- . completion and endorsement of Provincial Education Plan
- . maintenance of centers
- . enrolment of students
- . creation of necessary teaching positions
- . appointment of instructors
- . identifying the type of courses to be offered in the centre
- . development of local curricula

The National Government will be responsible for the:

- . payment of instructor salaries
- . pre-service training of vocational centre instructor
- . curriculum development and accreditation
- . provision of inspectorial service
- . development of criteria for the registration of the centers
- . provision of opportunities for teacher development
- . allocations of teachers to provinces
- . development of policy relating to school subsidies

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Ten Year Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in TVET section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District t and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
TVET Education											
Minor outcome V1											
Review the status and roles of all vocational institutions in the province.											
Determine the status of all vocational centers in the Province.											
Liaise with NDOE for change of status.											
Creation of appropriate number of teaching positions.											
Provincial Selection Policy to be reviewed in 2009.											
Ensure PEB's endorsement is secured for the review of the selection Policy.											
Awareness on gender participation in Provincial TVET Program											
Province to establish a Provincial TVET Committee in 2007.											
Ensure a well represented membership..											
Liaise with NDOE for the Committee's Terms of references and responsibilities.											
Establish meeting schedules are in place.											
Minor outcome V2											
Review curriculum in vocational schools to reflect both formal and non formal sectors in the Province.											
Carry out need analysis survey within the communities.											
Adapt existing full time courses for minimum one to two year duration..											
Support the production of the locally-based curriculum.											
.Conduct community based program in and out of schools.											
Liaise with NDOE for appropriate course materials											
Provide more training on entrepreneurship											
Adopt existing short courses from NDOE line department and other organizations.											
Minor outcome V3											

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Province to secure training Places with PNGEI for training of Vocational teachers under the DoVET program											
Liaise with PNGEI for training places of five per year over the planned period.											
Provide yearly funding support for training program.											
Establish selection criteria.											
Establish a Provincial policy on teacher training and recruitment.											
All instructors to have teaching qualification with five years of field experience in their trade.											
Provide professional development opportunities for vocational instructors..											
Conduct skills audit of instructors and Managers											
Identify, develop and deliver courses to include entrepreneurial and adult education skills.											
Minor outcome V4											
Develop and implement a sustainable, affordable and appropriate school fee policy.											
Conduct a review to ascertain the viability of a Grade 8 graduate Incentive Scheme.											
Determine on an annual basis, the cost of delivering vocational education programs.											
Promote the principles of good governance in the administration of vocational institutions.											
.Develop appropriate systems for financial, inventory and asset management.											
Review guidelines for vocational centre Board of Management.											
Strengthen the role of the vocational centre coordinator in the province.											
Develop institutional plans.											

TVET Education

Performance Area: Access		
Minor Outcome	Target	Measure(s)
An appropriate number of Technical Vocational Institutions providing technical skills training opportunities as well as access for higher educational advancement.	Review the roles and status of all Vocational centers in 2009	All Vocational centers role are reviewed in 2009.
	Re-registration of Talidig and Ramu Sugar Technical Schools in 2010	Talidig and Ramu Sugar Vocational centers are re-registered as Technical Schools
	Provincial Selection policy to be reviewed in 2009	Review made on the Provincial selections policy.
	Province to establish a Provincial TVET Development Committee in 2007	Formation of the TVET Development Committee.

Performance Area: Quality Curriculum and Monitoring		
Minor Outcome	Target	Measure(s)
A quality vocational skills training program provides clients with skills that are relevant and required by the community and industries.	The curriculum be reviewed and developed to reflect both formal and non formal sector development needs in the Province in 2010.	Development of curriculum reflecting both formal and non formal sector needs.
	All Programs in TVET institutions will be enterprise driven for self reliance and sustainability by 2012.	TVET Programs be enterprise driven for self reliance and sustaining the institution.
	Review and adopt existing short courses from NDOE, line departments and other organizations in 2010.	Reviews of all short courses.
	Province to establish a Provincial Accreditation Policy guidelines for Provincial Based short courses in 2010	Establishment of provincial Accreditation Policy guidelines for Provincial short courses.
	All vocational institutions offer short term community and industrial driven programs by 2012	Short courses be offered for community and industries.

Performance Area: Quality Teacher Education and Training		
Minor Outcome	Target	Measure(s)
The provision of sufficient numbers of appropriately trained and qualified vocational centre instructors and managers.	The Province to secure training Places with PNGEI for training of Vocational Teachers under the DoVET program in 2011.	Training places is secured with PNGEI for the province
	By 2012 all instructors will have a teaching qualification with five years of field experience in their trade.	All instructors teaching qualification be standardized.

Performance Area: Quality Management		
Minor Outcome	Target	Measure(s)
A vocational education system that is both cost-effective for the government and affordable for all.	A review of all teachers in vocational centers based upon the full time equivalent students in 2010.	Complete review of teachers' allocations to all institutions.

FLEXIBLE, OPEN AND DISTANCE EDUCATION

Definition

FODE is defined as a system which provides a more flexible, open distance type of education that gives alternate opportunities to students to pursue other pathways of formal education leading to grade 12 and tertiary education & training.

Situational Analysis

Access

The Madang Provincial FODE center is linked up to 6 district study centers and 30 registered study centers. There are currently no district FODE centers to provide a district co-ordination and monitoring of the registered study centers. This will be included in the ten year plan as it provides more flexible opportunities to students in the rural areas of the Province.

Table 30 *Current FODE enrolment –*

	Grade 7	Grade 8	Grade 9	Grade 10	Total
English	5	1	35	50	90
Maths	6	2	0	0	8
P/Maths	0	0	50	14	64
F/Maths	0	0	44	45	89
S/Sci	0	15	45	17	77
Sci	0	9	0	0	9
Comm	0	20	14	10	44
Env.Std.	0	0	6	0	6
Total	11	47	194	136	388

There are at present 249 new students enrolled this year together with 64 continuing in more than 700 different courses in the Provincial FODE program, the bulk of them being enrolled in grades 9 and 10. Of the new intakes, a good number of them are students from the formal system who enrolled to upgrade their grade 10 marks. The major concern is the large number of the non current students; this group comprises two thirds of the total enrolment. Many of the non-current students have been enrolled in the program for more than five to ten years. This is basically due to long distances many of them live from the center as well as delay in subject materials availability. The slow turn around of students assignments depended much on the subject enrolment and teachers returning of Books after marking. Teachers marking allowances has been un-reliably paid, thus, frustrating the turn around of students assignment books which further frustrates the student learning and performances. Furthermore, is the insufficient number of markers to get the assignments marked on time. Most of the markers are teachers, mainly from nearby secondary schools.

There is also a sufficient number of students undertaking FODE studies at the vocational centers in the province. The bulk of these groups are grade six and eight leavers who are using FODE materials to improve their Basic English and Mathematics skills.

Curriculum

The curriculum has remained unchanged in all FODE programs in the country and is supplied from the College of Distant Education. Materials for students in the Province have been much of a concern due to the insufficient supply and inadequate distribution to meet the total students. There is lack of facilities for the production and duplication of materials to meet the demand. Prolong waiting has been one of the biggest drawbacks which has caused students to abandoned studies.

Teachers

The center has one full time instructor, and one assistant instructor and one office secretary. There are five part time markers; most of them are teachers from nearby schools. The number of full time teachers are inadequate and the need to reviewed and support to cater for districts and rural based registered study centers demand. The provincial required ratio of 1: 30 students is what the province will pursue with the Provincial Funding which has been annually allocated through the Education Branch

Management

The number of FODE centers has increased over the last five years due to increased demand for such services in the Province. The registered study centers provide a face to face teaching with college of distant education courses being offered, while correspondence study centers only co-ordinate and supervise student's studies.

Attrition in the Province is determined by costs and distances most rural students' faces weekly in coming to the center. This is further impounded with management issues such as poor administration of marking students work and un-timely delivery of materials.

The Province regularly provides funding assistance to the centers administrative operations for the purpose of ensuring effective and efficient delivery of FODE services. Its management system is too centralized and much to achieve the desired outcomes of the Province has been complicated as its administration and decisions making powers are with Waigani. This system has to be reviewed and decentralized so that the student's needs are catered well within the Province. The Memorandum of Agreement between the Center and the Madang Provincial Government has been drafted and will be considered within this Plan. This agreement will provide a clear sense of directions for FODE within the Province as more and more support and Control is granted to Provinces to take.

~~The education Resources Center will be upgraded and the name will be changed to 'Education Leadership Center' to allow teachers to undergo short courses and training to become better school leaders through upgrading teacher qualification and training. TVET facilities, the library facilities, FODE center, University Center, IT facilities, auditorium facilities, and other training component facilities will be built with the support from all stakeholders with the aim to improve teacher training and skill upgrading. Education village will also be introduced to have the Education staff and trainers accommodated at the training site.~~

Comment [DoE1]: Added to allow province to access productive teacher qualification and training.

The Plan

Major Outcome

The provision of a flexible, open and distant education which gives alternate opportunities to students to pursue other pathways of formal education leading to grade 12, tertiary education and training.

Minor Outcome

Access

A significant growth in enrolment achieved by offering a number of demand driven programs and courses.

Distant education will be strengthened and supported as an alternate venue to enable the 80 percent of school leavers in the Province to pursue further education. It has a potential to reach a broader audience at lower cost to both the government and the client. In addition, it has a potential to address the difficulties of distance and terrain in the delivery of education services to the mass.

Arrangements to be put in place will see the following initiatives –

- Review of the current provincial FODE structure which will see the establishment of District FODE Centers.
- The integration of FODE programs into Vocational and Technical institutions.
- The privatization of Registered Study Centers
- The establishment of Provincial FODE policies to govern the expansion and quality of FODE curriculum implementation in the Province.
- Increased funding and resource support for the Provincial FODE program.

Target: F1.1

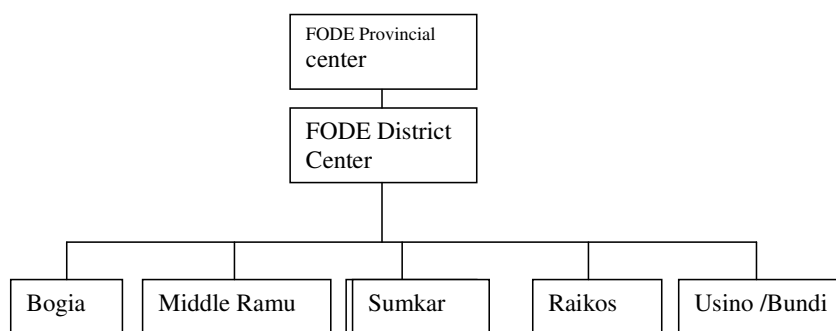
The review of the Provincial FODE structure to be in place by 20010

The current decline in grade 6 and 7 enrolment is due to reform within the Primary sector. An anticipated increase is in grade 9 and 10 and with the introduction of Grade 11 and 12 matriculation program now discharged from the University center, will see a marked increase in grade 11 during the Planned period.

Table 31 Projected FODE enrolments by Grade and selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Grade 9	300	583	629	637	968
Grade 11	0	601	807	878	918

Figure 4– flow chart showing decentralization of FODE services.



Five Registered study centers for each district

There will be a district FODE Centre in each district, operating beside the Junior and Senior Technical School.

Target: F1.2

The integration of FODE programs into TVET institutions by 2014

This district FODE Center will also provide services to the Registered Study Centers in each district. The Primary Schools in each district will be grouped into clusters to be serviced by the registered study centers. These Registered Study Centers are to be managed by Private Providers in consistent with the Provincial and National Education Policies in implementing the Provincial and National approved curriculum and assessment and achieving the required standard. A set of criteria will be developed for the granting of approval to private providers. Each district FODE Study Centre will have a qualified secondary school teacher to supervise and manage it.

Target: F1.3

The development of Provincial FODE policies by 2010

The principal target groups will be-

- Grades 6 to 8 students in remote schools
- Students who choose to complete their Grades 9 and 10 education through the flexible, open and distance education mode and then articulate into the formal system following examination at grade 10.
- Those who want to complete a Grade 6 to 12 education.
- People undertaking technical and vocational training courses.

Strategies and Activities:

- ***Establishment of a Provincial FODE Planning and Monitoring Committee.***
 - PEB to appoint the working committee.
 - Draw up terms of reference and submit to PEB for approval.
 - Secure funding for the functions of the committee.

- Establish linkages with office of Distance Education for an efficient and effective arrangement to be secured for FODE programs in the Province.
- ***Review the Provincial FODE structure to allow for increased access into the program.***
 - Support to be secured from PEB and NDOE.
 - Greater degree of awareness required at all levels.
- ***Integrate the FODE programs into TVET institutions in the Province to address increased access.***
 - Seek PEB and Provincial Government support.
 - Appointment of qualified teachers.
 - Closer dialogue with TSC to be maintained.
- ***Develop a Provincial FODE policy to govern the implementation of programs to ensure quality is maintained in the delivery of the programs.***
 - Seek representation from different stakeholders.
 - Established the committees terms of reference.
 - Ensure that quality control is in place for all FODE programs.
- ***Increase the Provincial Government Funding support.***
 - A memorandum of agreement to be secured between the Provincial Government and FODE.
 - Budgetary support is maintained yearly through the Provincial Government subsidy arrangement.

Minor Outcome F2

Quality Curriculum and Monitoring

The curriculum and assessment programs offered will be based on and articulate with the mainstream education system.

The established FODE curriculum and assessment programs is in place ,however, other value-added programs such as computing, tourism and hospitality will be explored.

Target: F2.1

Value added programs to be integrated with FODE programs by 2009.

FODE programs will interlinked with the formal education program where the idea of “one system, many pathways with same outcomes” will be sought. Students wishing to do part of their secondary education through FODE will be able to transfer between conventional schools and FODE. This means that an appropriate assessment, examination and certificate system has to be in place. This will then allow for examinations sat by distance education students to be the same as those sat in the formal streams. Entry points and exit points between the two system will also be strengthened and emphasized.

Target: F2.2

An appropriate assessment, examination and certification system to be in place by 2011.

The provincial FODE program through its six district centers will provide relevant demand driven options for students. Recognition of prior learning through work and life experiences will enable

students to gain credit towards course program. FODE courses will be reviewed, restructured and upgraded to provide pathways for students to:

- Enroll at anytime of the year
- Study at the own pace
- Study at a time and place convenient to them
- Complete assignments and sit for examinations and as when they are ready.

The Province will pursue with NDOE the current printing and distribution systems of course materials, which is a major impediment to an effective program in the Province, be reviewed and decentralized. The current provincial supply and tender arrangement will be embarked upon as an alternate arrangement for the National Department of Education to undertake with regards to the National Distribution Policy.

Target: F2.3

Review of the printing and distribution of FODE course materials to the Province by 2008.

Strategies and Activities:

- ***Review the current curriculum and CODE practices.***
 - Develop appropriate policies to identify points of articulation between FODE and the formal school system.
 - Develop and deliver other programs such computing, hospitality & tourism as well as adult literacy programs and other short modular courses.
 - Adapt the reform curriculum in the upper primary, lower secondary and upper secondary grades for use in distance education mode.

Minor Outcome F3

Quality Teacher Education and Training

The provision of well trained and qualified staff and support personnel.

Priority will be given to the provision of well-trained and committed FODE teachers and support personnel to effectively make FODE programs available to the people of Madang that meets required standards. Incentives will be needed to attract qualified locals teachers to return to the districts, while Madang FODE center, being one of the large centers, will require additional teaching and guidance staff to provide special support to students. The education Resources Center will be upgraded and the name will be changed to 'Education Leadership Center' to allow teachers to undergo short courses and training to become better school leaders through upgrading teacher qualification and training.

The reformed curriculum and assessment procedures in FODE will necessitate training for FODE teachers and staff in curriculum design and assessment. Harnessing new technologies will also mean that FODE staff will need training in the development and production of curriculum materials for a range of delivery mechanism at all levels (HQ, Provincials, District and Registered Study Centers).

Target: F3.1

Appropriate training will be provided for the Coordinators and staff.

Current staff will be given the opportunity to upgrade their skills and knowledge through normal staff development and training programs.

The Provincial FODE structure review will see trained and qualified Secondary teacher at the District study center to coordinate and the FODE programs there. The Memorandum of agreement will be developed and pursued with the Madang Provincial Government to fund this arrangement.

Target: F3.2

A memorandum of agreement to be developed and pursued with the Madang Provincial Government for support by 2009.

Strategies and Activities:

- ***Improve the capacity of FODE staff to produce curriculum and assessment materials for distance education.***
 - Upgrade staffs skills, knowledge and competencies.
 - Appointment of specialized course teacher
 - Monitor of standards..
- ***The development of a memorandum of agreement between FODE and the Madang Government for Manpower training support.***
 - Training of FODE personals at provincial and district level.
 - Funding support for hire of qualified teachers.

**Minor Outcome F4
Management**

An institution offering flexible, open and distance education.

The current concept of distance education will be reviewed reflecting on the current technological changes, advances and demands. The revised pathway will provide for educational programs that maximize choices and offer a lot more flexibility in the students learning. Linkages with the community at large will be strengthened to maximize potential support for the programs to pursue these dimensions. FODE will participate in innovative course program designed and tailored for those in both the formal and informal sectors of the economy. Current dialogue with Infor-Tech Ltd. For instance, for the establishment of a computerized Management information system will be encouraged. TVET facilities, the library facilities, FODE center, University Center, IT facilities, auditorium facilities, and other training component facilities will be built with the support from all stakeholders with the aim to improve teacher training and skill upgrading. Education village will also be introduced to have the Education staff and trainers accommodated at the training site.

Target: 4.1

Establishment of a computerized Management program by 2010.

The Programs will be reviewed for their relevance and innovations to attract enrollments. The display of a high credibility of independence portrait by graduates of this education system is highly commended by the Province.

Strategies and Activities:

- ***Increase support for distance Education in the Province.***
 - Strengthen Linkages with community as well as all stakeholders.
 - Monitor improvements consistent with the national education system prerequisites.
 - Establishment of the Provincial FODE governing council

Responsibilities:

Education will be a shared responsibility between stakeholders who are very important key players to the development and quality of education in the Province.

Parents and Community will be responsible for the:

- payment of parental contributions
- participating in Parents and citizen activities
- involvement in school counseling and discipline services.

School Board of Governors will be responsible for the:

- recommendation of teachers for appointments
- planning of infrastructure requirements
- promotion of school and community relationship.

Provincial Government will be responsible for the:

- completion and endorsement of provincial education plans.
- maintenance and upgrading of school infrastructures.
- establishment of new school infrastructure.
- creation, abolishing of teaching positions.
- appointment of teachers
- administration of scholarship scheme.
- payment of provincial component of school subsidies.
- sponsorship for teachers training program/ in-services.
- administration of examinations.

National Government will be responsible for the:

- payment of teacher's salaries in an efficient and timely fashion.
- selection of student for grade 11
- pre-determination of criteria for entry into grade 11.
- preparation and administration of schools certificate and higher school certificate Examination.
- pre service training of secondary school teachers.
- Curriculum Development
- Administration of National High schools
- provision of inspectorial services.
- provision of opportunities for teacher Development.
- allocations of teachers to provinces.
- development of policies relation to school subsidies and the scholarship program.
- production of grade 11 and 12 FODE materials

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Ten Year Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in the FODE section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District t and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Flexible, Open & Distance Education										
Minor outcome F1										
Establishment of a Provincial FODE Planning and Monitoring Committee..										
PEB to appoint the working committee.										
Draw up terms of reference and submit to PEB for approval.										
Secure funding for the functions of the committee.										
Establish linkages with office of Distance Education for an efficient and effective arrangement to be secured for FODE programs in the Province.										
Review the Provincial FODE structure to allow for increased access into the program.										
Support to be secured from PEB and NDOE.										
Greater degree of awareness required at all levels.										
Integrate the FODE programs into TVET institutions in the Province to address increased access.										
Seek PEB and Provincial Government support.										
Appointment of qualified teachers.										
Closer dialogue with TSC to be maintained.										
Develop a Provincial FODE policy to govern the implementation of programs to ensure quality is maintained in the delivery of the programs.										
Seek representation from different stakeholders.										
Established the committees terms of reference.										
Ensure that quality control is in place for										

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
all FODE programs.										
Increase the Provincial Government Funding support.										
A memorandum of agreement to be secured between the Provincial Government and FODE.										
Budgetary support is maintained yearly through the Provincial Government subsidy arrangement.										
Minor outcome F2										
Review the current curriculum and CODE practices.										
Develop appropriate policies to identify points of articulation between FODE and the formal school system.										
Develop appropriate policies to identify points of articulation between FODE and the formal school system.										
Adapt the reform curriculum in the upper primary, lower secondary and upper secondary grades for use in distance education mode.										
Minor outcome F3										
Improve the capacity of FODE staff to produce curriculum and assessment materials for distance education.										
Upgrade staffs skills, knowledge and competencies.										
Appointment of specialized course teacher										
Monitor of standards										
The development of a memorandum of agreement between FODE and the Madang Government for Manpower training support.										
Training of FODE personals at provincial and district level.										
Funding support for hire of qualified teachers.										
Minor outcome F4										
Increase support for distance Education in the Province.										
Strengthen Linkages with community as well as all stakeholders.										
Monitor improvements consistent with the national education system prerequisites.										
Establishment of the Provincial FODE governing council										

Flexible, Open & Distance Education

Performance Area: Access		
Minor Outcome	Target	Measure(s)
F.1 A significant growth in enrolment achieved by offering a number of demands driven programs and courses.	The review of the Provincial FODE structure to be in place by 2010.	An approved Provincial FODE structure.
	The integration of FODE programs into TVET institutions by 2011	FODE programs integrated into TVET institutions..
	The development of Provincial FODE policies by 2010.	Completion of provincial FODE policy.

Performance Area: Quality Curriculum and Monitoring		
Minor Outcome	Target	Measure(s)
The curriculum and assessment programs offered will be based on and articulate with the mainstream education system.	Value added programs to be integrated with FODE programs by 2009..	Introduction of value added programs into the FODE Programs.
	An appropriate assessment, examination and certification system to be in place by 2010.	Appropriate assessment and examination system in place.
	Review of the printing and distribution of FODE course materials to the Province by 2010.	Improvement in the printing and distribution of course materials.

Performance Area: Quality Teacher Education and Training		
Minor Outcome	Target	Measure(s)
F3. The provision of well trained and qualified staff and support personnel.	Appropriate training will be provided for the Coordinators and staff.	Training catered for Coordinators and staff.
	A memorandum of agreement to be developed and pursued with the Madang Provincial Government for support by 2010.	M.O.A is signed.

Performance Area: Quality Management		
Minor Outcome	Target	Measure(s)
F4. An institution offering flexible, open and distance education .	Establishment of a computerized Management program by 2010.	Establishment of a computerized Management system for the center.

Section 4

ADMINISTERING THE PLAN

ADMINISTERING THE PLAN

Major Outcome

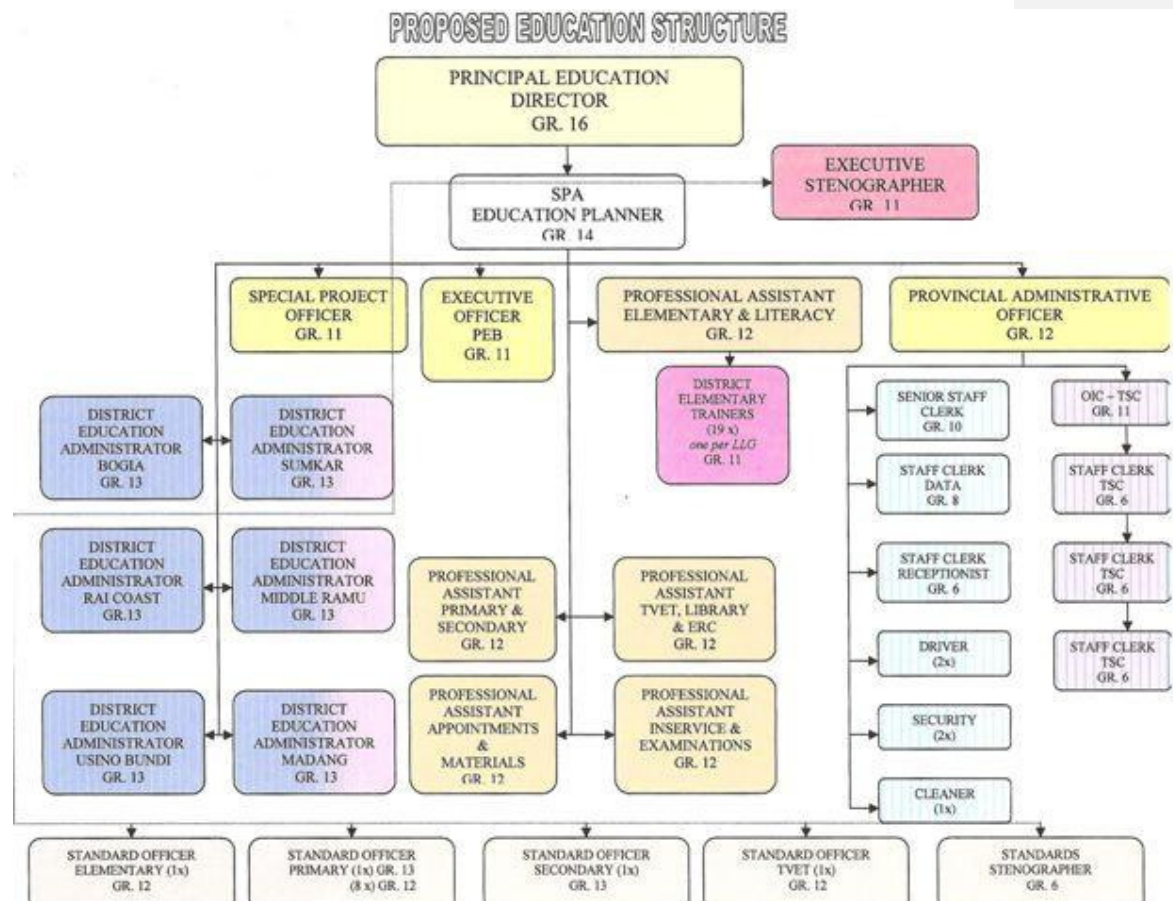
To develop an efficient, effective and sustainable administrative system in the delivery of education Services in the Province.

Changes and improvements to the administration of education at the Provincial, District and school level are required to achieve the outcomes of the Plan.

Areas to be address will include structure and organization, staffing problems, the establishment of efficient human resources management and other organizational systems at all levels. Attention will also be given to the ongoing training of planners and leader managers of all levels and to career planning including improved opportunities for women. Close consultation with the National Department of Education will be made for the establishment of district education boards, where appropriate and in accordance with Provincial Education Acts, and the strengthening of Provincial Educational Boards to oversee the implementation of this plan at the district and provincial levels.

The restructuring of the existing system education administration and the organizational structure will be incorporated into the overall Madang Provincial Administration structural change in 2009. As much as possible the present manpower ceiling will be maintained with marginal increase in areas critical to efficient, productive workforce at a Management level. This ten year education plan is subject to be reviewed after five years of implementation. The review will allow the education authorities and stakeholders to assess and evaluate the strengths and weakness and the needs for improvement of the implementation and management processes of the plan.

Figure 5. The Proposed Madang Provincial Education Branch structure.



The structure compliments the emphasis and major aspects of the Madang Provincial Ten year Education plan. Its main emphasis is on quality Management for the purpose of achieving quality education for the people of Madang. The structure is within the medium term development policy and the Millennium development goal specifications and is designed to respond to changes that will take place within the premix of the ten year plan and government priorities.

Organizational improvement

Minor Outcome A1

The Division of Education will strengthen its capacity to strategically respond to changing conditions and government priorities.

It is envisaged that during the plan period, the Madang Provincial Administration will be restructured to be in line with the government objectives of rationalizing the public service. The Provincial Education Branch will undertake an organizational review to compliment the major initiatives and shifts being undertaken within the context of the Plan. The organizational structure must be flexible enough to respond to changes and will be reviewed as and when appropriate. By 2010, a major training need analysis will be undertaken in close consultation with the Provincial Finance, Human Resource Management and other affected Divisions of the Madang Administration. In order to effectively deliver education services there will be an annual divisional Plan which will be supported by the Provincial Budget.

The aim is to identify types of skills and appropriate level of training required by officers to maximize productivity. In terms of funding and implementation the highest priority will be given to training programs that allows officers and teachers to progressively take over additional responsibilities aimed at maximizing output.

The Education Act, the Teaching Services Act and provincial education acts will be reviewed where appropriate to reflect changes in the organizations functions and structure. Teachers leave fares will be paid into their fortnightly salaries to reduce end of year leave fares problems.

Private education institutions will be encouraged at all levels of the system. The process of registering permitted schools and their ability to access school fee subsidy and funds from a grade 8 Graduate Incentive Scheme will be reviewed. All private education institutions will be monitored by the respective inspectors on regular basis to ensure that standards are being upheld.

Target: A1.1

By 2010 all divisional Staff will under take capacity building training

The Madang Provincial Education Board will also continue to play a major role in the management of education Services at the Provincial level. The District and assumingly, the Local level Government plans will be produced which will be consistent with this plan.

Regular consultations with major stakeholders will be encouraged in all educational developments, programs and projects.

Strategies and Activities:

- ***Restructure the Madang Provincial Education Division and improve its system to make it more efficient and effective in the delivery of education services.***
 - Conduct a review of the divisional capacity
 - Improve key organizational systems and practices
 - Develop Divisional annual plan.

- Provide advice on policy matters.
- Provide support to Provincial and Local level Government authorities in the development of project proposal
- Re improve Education Resource center for teacher training programs at all levels
- Change Education Resource Center name to ‘ Education Leadership Center’ which will accommodate TVET training, Elementary teacher training, short courses training for all institutions, FODE and Uni- Center, IT center, Auditorium, Education village and upgrade the current rundown facilities to modern standard to promote quality teacher qualification with the support from Madang Provincial Government and all stakeholders
- ***Develop an effective system for monitoring and evaluation of Donor-funded project.***
 - Monitor and evaluate the implementation of delivery of education services at local level government areas.

Human Resource Management

Minor Outcome A2.

Human resource systems and programs will be established for all levels of staff in the Provincial Education Branch.

The Provincial Education Branch will take full responsibility in the development of staff development programs and activities. A Provincial Education Human Resources Development Policy will be developed following a review of existing practices in the Department with assistance from the National Department. Linked to this will be a Human Resources Development Plan for the Provincial Administration to adopt.

Target: A2.1-

Provincial Education Branch staff Capacity Building programs commence by 2008.

Staff development programs for the province will provide opportunities for education personnel to develop their knowledge and skills in –

- the efficient management of activities within the Branch.
- providing opportunities for personal and professional growth in the system and
- the acquisition of new knowledge and skills to meet the changing needs of the system.

The Province will identify Training opportunities both within and outside province. These opportunities are to provide officers in the province with the specific skills required to undertake their day-to-day core responsibilities. To strengthen the division’s ability to lead the implementation of the Plan, priority will be given to the development of an integrated, work-based Senior Executive Development Program. This could include opportunity for selected senior officers to gain higher academic qualifications.

Divine Word University with its Degree Programs will be visited as well as other Universities where possible, However, increasingly the focus of training will be on short development programs embedded in the immediate challenges of the workplace, with the object of improving organizational capacity through building key work-related capabilities. Apart from affordability reasons, there is a strong body of research demonstrating that the most effective development programs are those, which are workplace based and integrated with current work challenges.

Equally important, the division will focus more in the strengthening of elementary teacher training program and supervision.

Work will concentrate on improving the payroll system and the development of a human resource management system. The increased capacity will see six (6) pay clerks within the teacher's salary section which will allow for one officer to be responsible for each of the districts in the province. A climate of employee-employer relationship will be encouraged to foster greater sense of care and ownership of teachers by the Province.

Target: A2.2

Personnel in the salary section be increased and inducted by 2012

Strategies will be in place for the advancement of female officers to senior positions to address the current gender imbalance in the province. This will apply for both within the Provincial administration as well as in the field for teachers.

Strategies and Activities:

- ***Develop and implement an appropriate human resource policy and plan for the division.***
 - Carry out regular assessment of staff training needs.
 - Provide work based training for divisional staff
 - Provide senior officers of the division with targeted training in order to improve their capacity to lead the organization.
 - Identify and support officers and teachers for rapid promotion.
- ***Develop a human resource management system.***
 - Improve the provincial payroll system
 - Increase payroll staff capacity from 2 to six officers.
 - Liaise with NDOE salary section for training of provincial officers.

Financial Management

Minor Outcome A3

Budgeting and financial systems and processes will be manageable and sustainable.

Planning and budgeting process will be integrated. The divisional Budget will be linked to the divisional annual plans and programs and made consistent with this plan. The administrative wing will be strengthened to effectively monitor disbursement and receipt of funds. Specialized training will be provided when necessary to ensure that the best practices is followed in the management of all funds.

The Provincial budget forecasting capacity will be developed within the Branch with assistance from the National Department of Education. This will allow for the Branch and the Province to prepare a medium term budgeting framework.

Cost recovery and income generating activities will be encouraged and systems put in place to ensure that all monies collected are suitably accountable for. Affordability for the clients should be ensured.

By the year 2010, the province will have developed an effective and sustainable system of financing and resourcing all approved educational programs, projects and establishments. Development and

financing education services in the province will be planned with close consultation with all stakeholders.

Target: A3.1

An effective and sustainable system of financing and resourcing of approved educational programs and projects will be established by 2010.

Private sector involvement in the financing of education will continue to be encouraged. Capacity works component of the approved education plan should be funded from sources within and outside the government budget. Funding of specific projects in schools and awards of scholarships to students and teachers can best be provided by the private sector.

Financial process will be reviewed and possible sources of cost recovery, such as the cost of administering Examinations, will be investigated. Further improvements will also be made in the area of procurement, supply and distribution of school materials in the Province.

Provincial and National Government will continue to provide in their respective annual budgets appropriation for development and provision of education services in the province. It is also important that the Madang Provincial Government and the Provincial Administration will need to build up administrative capacity to solicit funding from potential donors agencies such as AusAID, European Union, Asian Development Bank, JICA, World Bank etc.

Strategies and Activities:

- ***Integrate planning and Budgeting processes at all level.***
 - Review, budgeting and reporting system.
 - Provide relevant training program for planning and budgeting staff as well as sectional heads.
- ***Review financial procedures and processes.***
 - Generate revenue from cost recovery activities
 - Develop a Master assets register.

Information Communications Technology

Minor Outcome A4

Information communication technology systems and processes developed to support the management of educational programs.

Information and communication systems at all level of school throughout the Province will be strengthen and reviewed so that data transmission from schools to the Provincial headquarters will be reliable and effectively managed.

The Province will work closely with the National Department of Education, NGOs and stakeholders to strengthen the information technology database system by way of computers and other equipments so that transmission of data and other information from schools to provincial headquarter and to national department will flow smoothly to improve the system and provide correct and reliable data information.

Target: A4.1***A system of Data collection and storage to be established in 2010***

Greater use will be made of the latest technologies, both communication and information, to provide additional resources to be used for teaching and learning in schools and for community awareness purposes. This will include an extension of the current use of television, something the Province has already submitted for donor funding.

Strategies and Activities:

- ***Use appropriate information communication technology for flexible and effective dialogue between all levels of schools and other stakeholders***
 - Develop a data center for collection and storage of information
 - Liaise with schools and other authorities to provide proper and correct statistical data.
 - IT center with internet facilities with video conference facilities enabling the province to exchange knowledge, skills and cultures with other internal and external institutions

Communication Systems**Minor Outcome A5*****Communication system and process are effective for producing and disseminating information and raising standards.***

The Madang Provincial Ten year Plan will be supported by a major awareness campaign designed to reach even the most remote communities in the Province. The awareness will involve all levels of people within and outside the education Sector. The main emphasis is on the importance of education and parental obligations to enroll and maintain children at school. The program will also emphasize the responsibilities that communities have in relation to the operations and development of their schools.

Target: A5.1***Develop communication policy by 2010***

The Province will work closely with the National Department of Education and the stakeholders on a variety of forms of media to be utilized, bearing in mind that the most effective way of reaching the remote rural communities remains through face-to-face contact. The capacity of the Division to be able to develop relevant awareness materials will be increased and supported with the assistance from the National Department. Existing materials will be reviewed. The review will bear in mind the fact that information has got to reach education professionals in the field as well as the community at large. An innovative campaign will be developed to include strategies such as the use of drama groups. The use of the public media to disseminate information will be maximized through the strengthening of relationships and regular production of media releases.

With the help of the National Department, Library and information services will be developed to support and complement the education process. The Provinces will establish facilities at the provincial and district levels. These can then be used to support and complement the school curriculum. Existing school libraries should be used to serve as information centers for the local communities and distance education students.

Strategies and Activities:

- ***Develop and implement an awareness strategy to support the implementation of the Madang Provincial Education Ten year Plan.***
 - Identify target groups and provide awareness campaign
 - Disseminate news information on a regular basis to promote education policy.
 - Write, produce and distribute news information to schools and communities.

Implementation Schedule

This section outlines the time frame for the implementation of the Madang Provincial Ten Year Education Plan 2009 – 2018. Specific strategies and activities for each minor outcome in the Administration section of the plan are listed along with an indicative schedule for the implementation and completion. The Detail implementation plans will be provided each year through the annual yearly plans of the District t and primary schools.

Key:



Indicates full implementation



Indicates preparatory activities, reviews and implementation progress

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Administration										
Minor outcome A1										
Restructure the Madang Provincial Education Division.										
Conduct a review of the divisional capacity										
Improve key organizational systems and practices										
Change Education Resource Center name to 'Education Leadership Center' which will accommodate TVET training, Elementary teacher training, short courses training for all institutions, FODE and Uni- Center, IT center, Auditorium, Education village and upgrade the current rundown facilities to modern standard to promote quality teacher qualification with the support from Madang Provincial Government and all stakeholders										
Develop Divisional annual plan.										
Provide advice on policy matters.										
Provide support to Provincial and Local level Government authorities in the development of project proposal										
Develop an effective system for monitoring and evaluation of Donor-funded project.										
Monitor and evaluate the implementation of delivery of education services at local level government areas.										
Minor outcome A2										
Develop and implement an appropriate human resource policy and plan for the division.										
Carry out regular assessment of staff training needs.										
Provide work based training for divisional staff										
Provide senior officers of the division with targeted training in order to improve their capacity to lead the organization.										
Identify and support officers and teachers for rapid promotion.										

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Develop a human resource management system.										
Improve the provincial payroll system										
Increase payroll staff capacity from 2 to six officers.										
Liaise with NDOE salary section for training of provincial officers.										
Minor outcome A3										
Integrate planning and Budgeting processes at all level.										
Review budgeting and Reporting system.										
Provide relevant training program for planning and budgeting staff as well as al sectional heads.										
Review financial procedures and processes.										
Generate revenue from cost recovery activities										
Develop a Master assets register.										
Minor outcome A4										
Use appropriate information communication technology for flexible and effective dialogue between all levels of schools and other stakeholders										
Develop a data center for collection and storage of information										
Liaise with schools and other authorities to provide proper and correct statistical data.										
Minor outcome A5										
Develop and implement an awareness strategy to be support the implementation of the Madang Provincial Education Ten year Plan.										
Identify target groups and provide awareness campaign										
Disseminate news information on a regular basis to promote education policy.										
Write, produce and distribute news information to schools and communities										

Administration

Performance Area: Organizational Improvement		
Minor Outcome	Target	Measure(s)
A1 The Division of Education will strengthen its capacity to strategically respond to changing conditions and government priorities.	By 2010 all Divisional staff will undertake Capacity building training	Number of training course conducted for divisional staff. Number of Divisional staff attended Training courses.

Performance Area: Human Resource Management		
Minor Outcome	Target	Measure(s)
A2 Human resource systems and programs will be established for all levels of staff in the Provincial Education Branch.	Provincial Education Branch staff Capacity Building programs to be completed by 2008.	The Branch staff development plans and programs are completed.
	Personnel Salary staff be increased and inducted by 2012	Number of salary staff increased and inducted.

Performance Area: Financial Management		
Minor Outcome	Target	Measure(s)
A3 Budgeting and financial systems and processes will be manageable and sustainable.	An effective and sustainable system of financing and resourcing of approved educational programs and projects will be established by 2010.	Establishment of a sustainable and effective system of finance records.

Performance Area: Information Communication Technology		
Minor Outcome	Target	Measure(s)
A4 Information communication technology systems and processes developed to support the management of educational programs.	A system of Data collection and storage to be established in 2008.	A data system is in place

Performance Area: Communications		
Minor Outcome	Target	Measure(s)
A5. Communication system and process are effective for producing and disseminating information and raising standards.	Develop a communication policy by 2010	A communication policy is in place.

Section 5

FINANCING THE PLAN

FINANCING THE PLAN

The financing of education is shared between three different levels of Government, the communities, the parents, mission and donor agencies. By far the largest contributor is the national government. This section seeks to present estimated costs at 2006 prices for the whole of the plan period.

National Government costs

The major contribution made by the National Government to education in the province is through the payment of all teacher salaries and other entitlements and the provision of the function grants. These grants have replaced the provincial component of the school fee subsidies. The table below presents total entitlements by sector. These figures also include any allowances due.

Table 32 *Total teacher salary costs by sector (K'000s), selected years, 2006 to 2015*

	2006	2008	2010	2012	2015
Elementary	5652.2	6882.0	7956.9	9052.5	10234.4
Primary	16272.9	16841.1	18952.9	21712.7	25731.4
Secondary	2590.9	3617.6	4197.9	4391.9	5765.3
Vocational;	737.9	813.5	896.9	988.8	1144.7
	25253.8	28154.2	32004.7	36145.9	42875.8

The next table shows unit salary costs. This means the amount that the National Government pays in teacher salaries for each child in school. It is clear from this table that the elementary sector is by far the cheapest in terms of teacher salaries.

Table 33 *Unit salary costs by sector (Kina), selected years, 2006 to 2015*

	2006	2008	2010	2012	2015
Elementary	209.3	194.6	196.4	198.3	201.2
Primary	393.3	387.5	383.9	378.8	360.0
Secondary	724.5	723.8	726.6	727.9	722.8
Vocational	787.5	787.5	787.5	787.5	787.5

The National Government also provides grants for teacher leave fares. The next table shows the estimated requirements for leave fares. The present figures are not sufficient to satisfy all entitlements.

Table 34 *Projected leave fares (K'000s), selected years, 2006 to 2015*

	2006	2008	2010	2012	2015
Elementary	0.0	0.0	0.0	0.0	0.0
Primary	619.9	641.6	722.0	827.1	980.2
Secondary	98.7	137.8	159.9	167.3	219.6
Vocational	28.1	31.0	34.2	37.7	43.6
	746.7	810.4	916.1	1032.1	1243.5

The functions grants are provided as a line item in the provincial budget each year. The table below shows the amounts required for the period of the plan.

Table 35 Function grants by sector (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Elementary	270.1	353.7	405.1	456.5	508.7
Primary	759.8	814.9	957.2	1140.3	1429.4
Secondary	529.1	399.8	462.2	482.7	638.1
Vocational;	75.0	82.6	91.1	100.5	116.3
	1634.0	1651.0	1915.6	2180.0	2692.5

The percentage of function grants going to the basic and post primary sectors is shown below. This illustrates the major priority being that of basic education.

Table 36 Percentage allocations of function grants to basic and post primary education, selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Basic	63.0%	70.8%	71.1%	73.2%	72.0%
Post prim	37.0%	29.2%	28.9%	26.8%	28.0%

The final table shows a summary of the National Government contribution.

Table 37 Summary of National Government costs (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Salaries	25253.8	28154.2	32004.7	36145.9	42875.8
Leave fares	746.7	810.4	916.1	1032.1	1243.5
Subsidies	1634.0	1651.0	1915.6	2180.0	2692.5
Total	27634.5	30615.5	34836.4	39358.0	46811.8

Provincial Government costs

The Provincial Governments are responsible for all aspects of post primary education. In particular, they are responsible for all maintenance and new infrastructure in secondary schools. These figures are calculated on the following assumptions:

- That a new stream of Grade 9 and 10 will cost K0.5m
- That a new stream of Grade 11 and 12 will cost K0.75m, and
- That schools will receive K5000 per class for maintenance

Table 38 Post primary maintenance and new infrastructure costs (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Gr 9 class		3000.0	1500.0	500.0	9500.0
Gr 11 class		1500.0	1500.0	750.0	750.0
Mtce		655.0	760.0	795.0	1045.0
Total		5155.0	3760.0	2045.0	11295.0

It should be pointed out that the costs of new Grade 9 and Grade 11 classes are based upon the assumption that they will be added to existing schools rather than there being any new schools established. If the latter were to be the case then the costs would be much higher. As well as supporting expansion of the formal system the provincial government will also subsidise those who choose to continue their secondary education through distance education. The costs of this support are shown in the table of provincial government costs.

In addition to these not insignificant costs the province also has to pay for the administration of education in the province. The table below shows the costs of the education office in Madang.

Table 39 Provincial administrative costs (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Salaries	60.0	60.0	60.0	60.0	60.0
Admin expense	125.0	142.6	147.2	156.6	204.0
Travel	70.0	77.8	86.4	96.9	112.3
Training	38.0	42.5	48.0	54.0	62.8
Mtce	3.0	3.0	3.0	3.0	3.0
Tr recruitment	15.0	15.0	15.0	15.0	15.0
Other	120.0	256.9	307.3	323.0	397.4
	431.0	597.7	666.9	708.5	854.5

These costs are all at 2006 prices. The cost of some items, such as the administration of examinations and the cost of providing teacher in service, rise as enrolments and staffing rises whilst others, such as costs of travel outside of the province, remain constant over the period.

In addition to these the province is also committed to supporting the standards in schools. It will achieve this through providing support for scholarships for teachers to upgrade their qualifications and also to schools for running in service programs.

Table 40 Total teacher in service costs (K'000s) by sector, selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Elementary	76.9	110.4	131.6	145.4	155.3
Primary	154.8	180.8	133.7	153.2	181.5
Secondary	67.8	85.2	82.1	84.8	103.4
Vocational	52.1	57.4	63.3	69.8	80.8
	351.5	433.8	410.7	453.1	521.0

The total costs for the provincial government are shown below. Although these costs may appear very high it is being assumed that there will be a significant boost in government coffers later in the plan period due to the initiation of various resource projects.

Table 41 Total Provincial Government costs (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Post primary	0.0	5155.0	3760.0	2045.0	11295.0
Administration	431.0	675.5	750.7	793.3	983.5
Tr In Service	351.5	433.8	410.7	453.1	521.0
FODE costs	36.0	142.2	172.4	181.8	226.4
Total	818.5	6486.6	5201.4	3590.3	13148.4

Local-level Government costs

The Local-level Governments are responsible for supporting local communities in the establishment and maintenance of basic education facilities. The figures shown in the table below are calculated on the following assumptions:

- That a new elementary prep class will be supported by a grant of K3000
- That elementary schools will receive a grant of K250 per class for maintenance
- That a new Grade 7 class in a primary school will be supported by a grant of K10,000
- That primary schools will receive a grant of K800 per class for maintenance

Table 42 Basic education maintenance and new infrastructure costs (K'000s), selected years, 2006 to 2015

	2006	2008	2010	2012	2015
Elem mtce	192.3	234.1	270.6	307.9	348.1
Elem est	0.0	69.0	69.0	69.0	39.0
UP estr	0.0	59.7	100.0	259.4	152.6
Prim mtce	918.4	950.5	1069.7	1225.4	1452.2
	1110.7	1313.3	1509.3	1861.8	1991.9

Appendix A: ELEMENTARY EDUCATION

1. ELEMENTARY SCHOOL ESTABLISHMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	75	79	154	9	8	8	8	8	8	8	8	8	6
2	Madang	56	65	121	7	7	7	7	7	6	6	6	6	6
3	M. Ramu	25	125	150	15	14	12	12	12	12	12	12	12	12
4	Sumkar	83	29	112	4	4	4	3	3	3	3	3	4	3
5	Raikos	28	111	139	13	13	12	12	11	11	11	10	9	9
6	U. Bundi	57	38	95	4	4	4	4	4	4	4	4	3	3
	Total	324	447	771	52	50	47	46	45	44	44	43	42	39

An average of 45 elementary schools are expected to be opened year during over the plan period. The names of schools will appear in each of the six district's five year education plans in two slots.

2. ELEMENTARY TEACHER DEPLOYMENT REQUIREMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	130	315	445	32	32	32	32	32	32	32	32	32	32
2	Madang	186	146	332	6	16	16	16	16	16	16	16	14	14
3	M. Ramu	64	366	430	45	37	37	37	37	37	34	34	34	34
4	Sumkar	167	275	442	27	27	27	27	27	27	27	27	29	30
5	Raikos	66	260	326	29	27	27	27	27	27	27	27	21	21
6	U. Bundi	67	233	300	24	24	24	24	24	24	24	24	24	15
	Total	680	1595	2275	163	163	163	163	163	163	160	160	154	146

An average of 163 new intake of teachers to be trained each year in order to be absorbed into the average of 45 new elementary schools to be opened each year over the plan period.

Appendix B. PRIMARY EDUCATION

PRIMARY SCHOOL ESTABLISHMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	49	3	52	-	1	-	1	-	1	-	-	-	-
2	Madang	34	9	43	2	1	2	2	1	1	-	-	-	-
3	M. Ramu	27	19	46	2	5	5	2	2	1	1	1	-	-
4	Sumkar	37	4	41	-	1	1	-	1	1	-	-	-	-
5	Raikos	38	13	51	2	2	2	5	1	1	-	-	-	-
6	U. Bundi	19	8	27	3	1	-	-	1	1	1	1	-	-
	Total	204	56	260	9	11	10	10	6	6	2	2	-	-

All new primary schools will be established by changing the status of established elementary schools based on student population and long walking distances from nearest primary school.

PRIMARY SCHOOL TEACHER DEPLOYMENT REQUIREMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	198	18	216	-	1	1	2	2	3	3	2	2	2
2	Madang	397	54	451	1	3	5	7	8	9	9	8	2	2
3	M. Ramu	104	114	218	2	7	12	14	16	17	17	13	8	8
4	Sumkar	242	24	266	-	1	2	2	3	4	4	3	3	2
5	Raikos	176	78	254	2	4	6	11	12	13	11	10	5	4
6	U. Bundi	124	42	166	3	4	4	4	5	6	6	6	2	2
	Total	1241	350	1571	8	20	30	40	46	52	50	42	22	20

The number of teachers required each year will depend on the number of elementary schools changing status to primary schools and expansions within existing schools over the plan period.

Appendix C. SECONDARY EDUCATION

SECONDARY SCHOOL ESTABLISHMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	2	-	2	-	-	-	-	-	-	-	-	-	-
2	Madang	3	1	4	1	-	-	-	-	-	-	-	-	-
3	M. Ramu	1	1	2	-	-	-	-	-	-	1	-	-	-
4	Sumkar	1	1	2	-	-	-	1	-	-	-	-	-	-
5	Raikos	1	1	2	-	-	-	-	-	-	-	1	-	-
6	U. Bundi	1	1	2	-	-	-	-	-	1	-	-	-	-
	Total	9	5	14	1	-	-	1	-	1	1	1	-	-

SECONDARY TEACHER DEPLOYMENT REQUIREMENTS BY SCHOOLS

No	Schools	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Aiome	18	7	25	-	2	-	-	1	1	-	3	-	-
2	Brahman	26	8	34	-	1	1	-	-	-	-	2	4	-
3	G. Shepherd	18	7	25	-	2	-	-	1	1	-	3	-	-
4	Holy Spirit	18	17	35	8	2	-	-	1	1	-	3	-	-
5	Karkar	33	5	38	-	-	-	-	-	-	2	3	-	-
6	Malala	34	6	40	-	-	-	-	-	-	-	6	-	-
7	Raikos	18	18	36	-	1	1	10	-	-	-	-	2	-
8	Tusbab	40	12	52	-	-	1	1	2	1	3	5	-	-
9	C. Academy	4	29	33	3	7	-	-	2	4	3	6	1	-
10	Transgogol	-	18	18	18	-	2	-	-	1	1	1	-	-
11	Sumgilbar	-	18	18	-	-	-	18	-	2	-	-	1	2
12	Saidor	-	18	18	1	18	-	2	-	-	1	-	2	-
13	Ramu Sugar	-	18	18	-	18	-	2	-	-	3	7	3	-
14	Meiro	-	18	18	-	18	-	2	-	-	3	7	5	-
15	FODE	2	6	8	-	1	1	1	1	1	1	-	-	-
	Total	211	205	416	29	70	6	38	8	11	19	45	18	2

The increase in staff for secondary schools will depend on new establishments as well as expansion in Grade 9 and 11 classes during the plan period

Appendix D. TVET EDUCATION

TVET TECHNICAL SCHOOL ESTABLISHMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	-	3	3	1	-	-	1	-	-	-	1	-	-
2	Madang	3	0	3	-	-	-	-	-	-	-	-	-	-
3	M. Ramu	1	2	3	-	-	1	-	-	1	-	-	-	-
4	Sumkar	2	1	3	-	-	-	-	1	-	-	-	-	-
5	Raikos	0	3	3	-	1	-	-	-	-	1	-	-	1
6	U. Bundi	1	2	3	-	1	-	1	-	-	-	-	-	-
	Total	7	11	16	1	2	1	2	1	1	1	1	-	1

The current established vocational centers will be rationalized to junior technical school status, resulting in establishing one per district. Six of the junior technical schools will then become senior technical schools for each of the districts. At least three junior technical schools should be built to form the basis as clusters to the six senior technical schools in the district.

TVET TEACHER DEPLOYMENT REQUIREMENTS FOR TVET TECH SCHOOLS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	0	33	33	9	9	6	6	-	3	-	-	-	-
2	Madang	24	9	33	3	3	3	-	-	-	-	-	-	-
3	M. Ramu	4	29	33	-	9	5	5	5	-	5	-	-	-
4	Sumkar	18	15	33	15	-	-	-	-	-	-	-	-	-
5	Raikos	0	33	33	-	9	9	6	6	-	3	-	-	-
6	U. Bundi	6	27	33	7	10	5	5	-	-	-	-	-	-
	Total	52	146	198	34	40	28	22	11	3	8	0	0	0

FODE CENTRE ESTABLISHMENTS BY DISTRICTS

No	District	Current Establish	Number Require	Total	Establishment Plan 2009- 2018 Projections									
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Bogia	0	1	1	1	-	-	-	-	-	-	-	-	-
2	Madang	1	0	1	-	-	-	-	-	-	-	-	-	-
3	M. Ramu	0	1	1	-	-	1	-	-	-	-	-	-	-
4	Sumkar	0	1	1	-	-	-	-	1	-	-	-	-	-
5	Raikos	0	1	1	-	1	-	-	-	-	-	-	-	-
6	U. Bundi	0	1	1	-	1	-	-	-	-	-	-	-	-
	Total	1	5	6	1	2	1	0	1	0	0	0	0	0

Upon establishment District FODE Centres, necessary arrangements will have to made for staffing and markers in each of the districts

References

We acknowledged the following sources which assisted us to put the information together one way or the other;

- Common Wealth of Australia (2001), Enclaves or Equity
- Corporate Plan for Madang Province (2007-2012)
- Medium Term Development Strategies (MTDS) -PNG
- Microsoft Encarta Encyclopedia, (2002) Papua New Guinea.
- Teaching Services Commission Act-PNG
- National Census of PNG
- National Education Act -PNG