Rural and Remote Area Education Strategic Planning Study for Tanah Papua, 2014

Analytical and Capacity Development Partnership (ACDP)
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The study was commissioned by the Provincial Heads of Education from both the Provinces of Papua and West Papua with the specific purpose of developing a Strategic Plan for improving access to and quality of basic education provision in the remote and rural areas of Tanah Papua that will contribute to the Educational planning process based on the recently approved Presidential Decree of Special Autonomy in Education (Perdasus) as well as for the RPJMD (Provincial 5-Year Multi-Sectoral Strategic Plan) and the RENSTRA (Provincial 5-year Strategic Education Plan).
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The Five Year Strategic Plan presented in this draft document proposes a significant paradigm shift in the planning and provision of basic education for rural and remote areas in Tanah Papua. It is hoped that the content of this report will contribute to the discussions during the preparation of the RPJMD (Provincial 5-Year Multi-Sectoral Strategic Plan) and the RENSTRA (Provincial 5-year Strategic Education Plan) in Papua, and the ongoing education planning process in West Papua.

Based on “best practice” of international, national programs, and of Tanah Papua in particular, the proposal argues for a major refocusing on the part of the provincial district, and sub-district governments to create the community demand/ownership and supply necessary for improving education tailored to the specific needs of populations in rural and remote areas (RRA), particularly those underserved indigenous communities with predominantly indigenous populations. The target will be communities who live in these hundreds of kampung that are mostly rural and remote, characterized by some of the lowest human development indices and low education indicators in the country. This document recognises the complex interaction between demand and supply in education. However, despite good efforts on the part of the government to provide infrastructure and education resources for these rural and remote areas, the demand for education or community ownership has not matched the supply and investment, resulting in under use of facilities, poor participation, overage enrollment, teacher and principal absenteeism, high drop-outs, and resulting in low levels of learning as evidenced in literacy and numeracy rates.

The Strategy argues for a shift in focus to demand creation and community ownership of the education planning and provision in these targeted areas, building on the many successful examples of the village school (sekolah kampung or one-roof/small school) supported by a range of agencies including religious foundations (yayasan) and other CSOs in Tanah Papua.

Community participation in the local organisation of the education process, made possible through the use of mother-tongue based multi-lingual education, would be critical for providing effective and quality education in the RRA areas. This would require a cadre of teachers trained specifically for teaching in the rural and remote areas – who are knowledgeable, sensitive, and respectful of local customs, culture and language. The preparation of such teachers will require special tertiary institutions in which teachers are trained not only in transacting a contextually relevant curriculum through an appropriate classroom pedagogy such as multigrade teaching and learning, but in providing support with others for a wide range of development needs of the kampung community in which they are to live and serve. Examples of such “integrated services” are early childhood development, health, nutrition (through school feeding programs by the community), HIV/AIDS, maternal healthcare, parenting, and adult literacy. These schools would therefore need to serve wider development needs than conventionally envisaged in “main stream” schools in urban and peri-urban areas, and the constraints, characteristics and services would all need to be considered in developing specific indicators of minimal service standards (MSS) for rural and remote schools in Tanah Papua. A Threshold Level has been proposed for community schools (including use of the mother tongue for early grade instruction) to enable these schools to demonstrate a basic service standard before being ready – and eligible – to receive increased government funding to bring them to MSS level.

Such a Strategic Plan will have profound implications for governance reform, including real engagement of indigenous communities, planning, management, financing, supervision, the application of ICTs, and the capacity development of education personnel and practitioners at all levels from the provincial, district and sub-district levels to the community and schools themselves.

Box 1. Starting from the Indigenous Community

The Five Year Strategic Plan presented in this draft document proposes a significant paradigm shift in the planning and provision of basic education for rural and remote areas in Tanah Papua. It is hoped that the content of this report will contribute to the discussions during the preparation of the RPJMD (Provincial 5-Year Multi-Sectoral Strategic Plan) and the RENSTRA (Provincial 5-year Strategic Education Plan) in Papua, and the ongoing education planning process in West Papua.

Based on “best practice” of international, national programs, and of Tanah Papua in particular, the proposal argues for a major refocusing on the part of the provincial district, and sub-district governments to create the community demand/ownership and supply necessary for improving education tailored to the specific needs of populations in rural and remote areas (RRA), particularly those underserved indigenous communities with predominantly indigenous populations. The target will be communities who live in these hundreds of kampung that are mostly rural and remote, characterized by some of the lowest human development indices and low education indicators in the country. This document recognises the complex interaction between demand and supply in education. However, despite good efforts on the part of the government to provide infrastructure and education resources for these rural and remote areas, the demand for education or community ownership has not matched the supply and investment, resulting in under use of facilities, poor participation, overage enrollment, teacher and principal absenteeism, high drop-outs, and resulting in low levels of learning as evidenced in literacy and numeracy rates.

The Strategy argues for a shift in focus to demand creation and community ownership of the education planning and provision in these targeted areas, building on the many successful examples of the of the village school (sekolah kampung or one-roof/small school) supported by a range of agencies including religious foundations (yayasan) and other CSOs in Tanah Papua.

Community participation in the local organisation of the education process, made possible through the use of mother-tongue based multi-lingual education, would be critical for providing effective and quality education in the RRA areas. This would require a cadre of teachers trained specifically for teaching in the rural and remote areas – who are knowledgeable, sensitive, and respectful of local customs, culture and language. The preparation of such teachers will require special tertiary institutions in which teachers are trained not only in transacting a contextually relevant curriculum through an appropriate classroom pedagogy such as multigrade teaching and learning, but in providing support with others for a wide range of development needs of the kampung community in which they are to live and serve. Examples of such “integrated services” are early childhood development, health, nutrition (through school feeding programs by the community), HIV/AIDS, maternal healthcare, parenting, and adult literacy. These schools would therefore need to serve wider development needs than conventionally envisaged in “main stream” schools in urban and peri-urban areas, and the constraints, characteristics and services would all need to be considered in developing specific indicators of minimal service standards (MSS) for rural and remote schools in Tanah Papua. A Threshold Level has been proposed for community schools (including use of the mother tongue for early grade instruction) to enable these schools to demonstrate a basic service standard before being ready – and eligible – to receive increased government funding to bring them to MSS level.

Such a Strategic Plan will have profound implications for governance reform, including real engagement of indigenous communities, planning, management, financing, supervision, the application of ICTs, and the capacity development of education personnel and practitioners at all levels from the provincial, district and sub-district levels to the community and schools themselves.
Chapter 1
Introduction

This document sets out a proposed Strategic Plan for the provision of basic education in the rural and remote areas of Papua and West Papua (Tanah Papua). It represents the findings of a program conducted by the Analytical and Capacity Development Partnership (ACDP) with funding from both Australian Aid (AusAID) and the European Union (EU) and administered by the Asian Development Bank (ADB). The study was commissioned by the Provincial Heads of Education from both the Provinces of Papua and West Papua with the specific purpose of developing a Strategic Plan for improving access to and quality of basic education provision in the remote and rural areas of Tanah Papua that will contribute to the Educational planning process based on the recently approved Presidential Decree of Special Autonomy in Education (Perdasus).

Specifically, the development objective of the 11–month ACDP program (September 2012–July 2013) was to identify promising and sustainable strategies to improve access and quality for children between the age of 6 and 15 years of age living in the remote and rural areas of Tanah Papua. The Strategy and its related analytical studies, field surveys and document reviews, seeks to identify the main issues which would have to be addressed including language mapping and planning (including language of instruction issues, pedagogy and assessment); community ownership and demand creation; teacher preparation, development and management, with special focus on the indigenous teacher training colleges (KPG); school organisation, teacher workforce and conditions; learning resources (including pedagogy and curriculum); models for distance education and application of ICT in Education; and the role of public and private sector (including Foundations). The program also strived to identify and document good practices that have been found to be effective and relevant in policy, programs and models of education delivery systems in these difficult target areas throughout the world. The resulting Strategic Plan is intended to inform the design of a pilot project or projects to be implemented by other donor partners in Tanah Papua. The draft Strategic Plan is the result of numerous consultative workshops and meetings held in both Jayapura and Manokwari in the provinces of Papua and West Papua respectively. This draft document will be reviewed and discussed in further workshops in these provincial capitals in June/July 2013, and the resulting final document will be presented at a workshop in Jakarta in August 2013.

The draft Strategic Plan is organized around a number of basic principles that have emerged from a review of international best practice as well from a close examination of current practice in the rural and remote areas of Tanah Papua itself. Such experiences were selected to be relevant and appropriate for Tanah Papua based on based on consideration of physical and cultural context, cost effectiveness, government capacity and the needs of the most disadvantaged populations that tend to live in the rural and remote areas. Each section will begin with the identification of a specific principle drawn from this review of case studies, and sections will end with the formulation of a policy option for consideration by the two provincial governments.

1 Throughout the document, Tanah Papua, refers to the two provinces of West Papua and Papua.
2 Peraturan Daerah Khusus Bidang Pendidikan refers to the Decree of Special Autonomy in Education, targeting mainly the rural and remote areas for education provision and affirmative action.
3 Throughout this paper, the term “indigenous” is used to refer to Papuans as opposed to non-Papuans (migrants from other parts of Indonesia and their offspring). The current KPGs prepare teachers of Papuan and non-Papuan descent (see Chapter 4) although their mandate is to focus on producing teachers for mainly indigenous population areas.
Chapter 1 Introduction

The document borrows heavily on the findings of previous studies conducted on the state of the education provision in Tanah Papua, viz.: a) The Structure of Education in Papua Barat (2005/6); b) Educability of the Papuan Children (2008); c) Teacher Absenteeism in Papua and West Papua (2012); and (d) Out-of-School Children, MOEC/UNESCO/UNICEF (2012).

The issues and strategies presented and discussed in the document are the result of various workshops held in Jayapura and Manokwari. Two workshops to discuss findings and strategies to address issues of teacher absenteeism, were organized and supported by UNICEF, others specifically addressed issues of education in rural and remote areas of Tanah Papua. The consultative workshops and many valuable meetings presented the opportunity to discuss these issues and brainstorm ideas with a diverse range of stakeholders and donor partners. Analytical research, field surveys and site visits were also conducted by the Summer Institute of Linguistics, and the State University of Cenderawasih, Jayapura (UNCEN) and the State University of Papua, Manokwari (UNIPA) of Papua and West Papua provinces respectively. The draft Strategy will be subject to review and modification in workshops to be held in both Papuan provinces; the resulting document will be presented in a final workshop to be held in Jakarta in September 2014.
Chapter 2
The Context in Brief

2.1 General Development Indicators

Papua is Indonesia’s second richest province after East Kalimantan in terms of total fiscal resources according to a World Bank report dated 2005 (Public Expenditure Analysis and Capital Harmonization) and according to Papua’s own Action Plan for Development Acceleration:

*The abundance of natural resources, as well as policy of fiscal decentralization and special provisions related to autonomy, led to an annual growth rate of Papua well above the national average for several years, and in terms of fiscal wealth is the second richest province in Indonesia.*

Indonesia attained a milestone in 2011 by reaching 6.5 percent GDP growth, the highest since 1996. It is also ranked as one of the top 10 upward movers in human development over the past 40 years, as measured by the Human Development Index (HDI). Indonesia continued to improve its national ranking in 2011.

Indonesia’s HDI value for 2012 is 0.629 - in the medium human development category - positioning the country at 121 out of 187 countries and territories. The rank is shared with Kiribati and South Africa. Despite this, Papua ranks 29th out of 30 provinces in terms of three human development indicators, life expectancy, educational attainment and standard of living. West Nusa Tenggara is the only Indonesian province in a worst economic and social state than Papua. Papua also has the highest rate of illiteracy (see Figure 1).

![Figure 1. Illiteracy Rates, Above 15 years old](image)

Source: BPS, 2011

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4 Reference needed
6 Some suggest that the difference is due to improved data and better understanding of the issues.
Although the data would indicate that illiteracy rates are increasing for the two provinces of Tanah Papua, the apparent increase may be due to more and better data that is now available. This, as with other data, needs to be carefully reviewed. The provinces also have the highest rates of poverty, particularly in the rural areas and the lowest scores on the Human Development Index (HDI)\(^7\) in the country.

**Figure 2. Percentage of Poor People**

Source: BPS, 2011

Although Papua is ranked the lowest province in Indonesia in terms of HDI, West Papua fares little better. Papua has a mean index of 1.15 compared with the Indonesia mean of 0.629. The Provincial Planning Department (BAPPEDA) has recently expressed the need to address these disparities and to focus government programs and donor partner support specifically to target the lowest HDI zones in Tanah Papua. The strategy for remote and rural area education, given in this document will follow this governmental recommendation by targeting strategic planning to the development zone with the lowest Human Development Index.

**Figure 3. Human Development Index**

Source: BPS, 2011

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7 The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. As of 2011 a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of schooling for the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entrance age, which is the total number of years of schooling a child of school-entrance age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child’s life. The standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2005 international dollars converted using purchasing power parity (PPP) rates.
Tanah Papua lags significantly behind the rest of Indonesia in terms of education provision. The two provinces have among the lowest education indicators nationally. Indonesia is at risk of not achieving Millennium Development Goal 2 for primary education and its own goals for Education for All by 2015, largely due to provinces such as Papua and West Papua. Governance issues loom large, and are critical to effectively addressing the complex issues and challenges of improving education there.

The high incidence of poverty, poor health conditions, cultural and linguistic diversity and poor infrastructure contribute to making the region among the most challenging environments in Indonesia and in the world. Government statistics (BPS, Susenas, and PPLS)\(^8\) indicate that the two provinces have the highest incidence of poverty in the nation. Again, quoting the Action Plan:\(^9\)

> ...However, major revenue of Papua Province and impressive GDP growth have not been balanced with adequate performance in combating poverty and improving human development.

### 2.2 Supporting Policies

The Provincial Education Offices of Papua and West Papua are currently focusing on implementing programs specifically targeting populations in “urban, peri-urban, remote and isolated” zones but with increased focus on rural and remote populations according to an “Affirmative Education Policy”\(^10\) mandated by provisions in several key Special Autonomy laws and decrees to promote the rights of indigenous Papuan communities.\(^1\) Since 2001, the Government has issued Law No. 21/2001 on Special Autonomy for Papua Province (“Otonomi khusus” or OTSUS), of which Chapter XVI specifically relates to issues of education and culture. Article 58 (1) explicitly states that the Provincial Government has the obligation to guide, develop, and converse the diversity of local languages and regional literature in order to maintain and strengthen the identity of Papuans. Furthermore, Article (2) of the same Law states that local languages may be used as the medium of instruction at the basic education level as needed. A year later, Law No. 20 of 2003 on the National Education System states that the community has the right to conduct education that is community-based through formal and non-formal education according to their religion, social environment, and culture for the benefit of the community (Article 55 (1)). Article 32 (2) of this law explicitly recognises the need to develop “special education services are for those who live in the isolated or remote areas, isolated indigenous community, and/or those who affected by natural disasters, social disasters, and economically unaffordable”\(^.\)

A major policy shift occurred in 2011, when the Presidential Decree 65 (Peraturan Presiden UP4B) was issued specifically focusing on ‘Accelerating the Development in Papua and West Papua‘: This opened up the opportunity for local legislation to address the needs of indigenous Papuans, focusing on the isolated areas, rural areas, (in the highlands or small islands, coastal areas or “lagging” areas) in addition to the urban and “strategic” areas.\(^1\) More recently, the Provincial Government and Parliament (DPRD-P), issued a new Perdasus/2012\(^1\) on the “Education Services for the Indigenous Papuans” (Komunitas Adat Terpencil/KAT).\(^1\) This provincial government decree asserts an “affirmative policy” covering the rights and obligations of both provincial and district governments to serve, and the community – including NGOs, faith-based

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8. SUSENAS - Survei Sosial Ekonomi Nasional or National Socioeconomic Survey
9. Ibid. (p. 6)
10. See for example ‘An Affirmative Education Model in Papua Province: The Small Primary School and the One-Rooftop Primary-Junior High Boarding School‘: The Department of Education, Youth and Sport, Province of Papua, 2012, that develops the typical colonial missionary school model for rural and remote schools, characterised by small, village schools in which elementary and junior secondary levels were integrated under “one-roof” and where indigenous students attended boarding facilities to cope with the long distances they would otherwise have to travel from home to school. This poses a challenge in terms of scaling up such models to Education for All demands, not least because of the risk of severing children from their parents, culture and language at a young age.
11. The term “community” is often overused particularly by NGOs as a blanket description of “all those people” in an area or village. Communities, as used in this document, can be defined by people’s shared interests, ethnicity, clan, family, age, gender as well as by locality. In Tanah Papua, as elsewhere, it is essential to recognise and understand the diverse, complex and heterogeneous nature of “communities”.
12. Focusing, for example, on areas rich in natural resources, or with specific skills.
14. KAT: Komunitas Adat Terpencil are the group/s of indigenous Papuans who live in the areas that are very difficult to access through communication, transportation, and infrastructures.
school foundations, and business sectors -- to participate in the provision of education services. This provincial policy covers key elements in education across formal, non-formal and informal education services, such as curriculum and the language of instruction, school principal, teacher, Kolese Pendidikan Guru/KPG (indigenous teacher training college) and Community Academy/Colleges, school infrastructure and facilities, evaluation and accreditation, quality assurance, supervision, community participation and financing.

See Annex A for a more detailed record of the relevant laws and decrees, particularly the sections more explicitly relevant for rural and remote education services for the Indigenous Papuans as stipulated under the Law 21/2001, Special Autonomy for Papua Province, Law 20/2003 on the National Education System, and PERDASUS, 2012 on the Education Services for the Indigenous Papuans.

The Presidential Decree (no. 65, 2011) on the “Accelerated Development of Papua and West Papua Provinces” specifies the need for multi-sector plans for the provinces from 2011 to 2014. Included in the plans should be the revitalization of education services covering all villages to prepare qualified human resources for the future of the provinces. Towards this end, Provincial and District Governments in Tanah Papua are engaged in the development of strategic plans to enhance and extend education services targeting indigenous and other under-served populations in rural and remote regions.

Whereas, the Perdasus 15 addresses the educational needs of indigenous Papuans, the Presidential Decree specifically focuses on rural, remote and isolated regions of Tanah Papua. There is a great deal of overlap between the two typologies, one purports to be a cultural and linguistic category, while the other is essentially a geographic distinction. However, there is a great deal of overlap since there are many significant cultural and linguistic distinctions within the rural and remote areas. The “affirmative education” strategy actually relates characteristic livelihood patterns on the different geographical categories. Both dimensions of extending educational services to the least well served in society are addressed in this paper, and the differences and similarities are exposed.

2.3 Addressing the Equity Gap in Education

The challenges faced in Tanah Papua are not just about overcoming distance, poverty, critical mass, remoteness, or isolation, 16 but the need to acknowledge the current inequities that exist in the region and to commit to closing the gaps while improving the quality of education, health and other social sectors.

Key challenges for development in Papua and West Papua spring from deeply entrenched inter-generational educational inequities for children and adolescents. Those inequities result in severe social and economic disparities that threaten to undermine social and political stability, as evidenced by recurrent political protests over the failure of Special Autonomy to improve (or ‘accelerate’) development for the indigenous peoples of Tanah Papua. Although the quality of the data is not always reliable, it does show: (i) high numbers of drop-outs and out-of-school children, (ii) gender imbalance of children’s access to education services at all levels, and (iii) high rates of teacher and principal absenteeism, particularly in the most remote schools (e.g. in highland districts, up to 48% of teachers and 70% of principals are absent on a regular basis). 17

According to the 2010 census, the combined total population of the two provinces is 3,635,093 18, of which about 78% are indigenous Papuan. The Papuan population in Tanah Papua increased from 887,000 in 1971 to 1,505,405 in 2000. This represents an average annual growth rate of 1.84%. The non-Papuan population increased from 36,000 in 1971 to 708,425 in 2000. This represents an average annual growth rate of 10.82%. The 2010 census figures only give a total population figure without disaggregating to respective ethnic groups, however the ethnic breakdown can be estimated by using the historical growth rates of the

15 Peraturan Daerah Khusus or Special Regional Law
Papuan population as has been suggested by some demographic experts. Assuming the historical Papuan annual growth rate has been maintained over the course of the last decade, the Papuan population in mid-2010 (at the time the census was conducted) would be 1,790,777. This equates to 49.55% of the total 2010 population of West Papua of 3,612,854. Accordingly the non-Papuan population would be 1,822,677, or 50.45%.

Overall some 70% of residents in the two provinces reside in rural areas (or villages located outside of urban centers). In Papua Province, some 37% of the population resides in mountainous highland districts, 41% in easy-to-access lowland districts, while another 21% resides in lowland difficult-to-access districts. In West Papua two-thirds of the population resides in easy-to-access lowland districts (67%). In West Papua, remote and isolated usually means an island with infrequent access.

Although educational opportunity has expanded in Papua Province, according to Bapak James Modouw, former Head of the Provincial Education, Youth and Sport Agency, significant challenges remain for raising the quality of education, with poor quality often giving rise to inequities for many children in school (e.g. contributing to early school leaving). The continued increase in the rate of illiteracy is also of concern. And the most alarming trend is the growing equity gap between the urban and rural sectors in education and related social indicators such as poverty and health.

2.4 Situation Analysis

Perhaps the most serious problem in the education sector that needs to be addressed is that of the paucity of accurate and reliable data. According to GOI data, 91% of children in Papua and 86% of children in West Papua attend primary school compared with the net national average of 96%. At junior secondary level, only 60% in Papua and 57% in West Papua are enrolled, compared to the gross national average of 91%. Girls comprise 44% of primary level enrolment. BPS Census data for 2010 as well as provincial education office data shows that there are deeply entrenched educational inequities for children and adolescents resulting in severe disparities in basic education that may be handed down from generation to generation and undermine social and political stability. Although the quality of the data is not always reliable, it does show:

(i) high illiteracy rates in all areas of Tanah Papua but especially in rural and remote areas, and among girls. Forty percent of the population aged 15-59 is illiterate, 27% of 15-24 year olds, and over 35% of 15-44 year olds (see Figure 4 below for the distribution among districts in Papua);
(ii) high numbers of drop-outs and out-of-school children, and
(iii) gender imbalance of children’s access to education services at all levels. The extremely high rates of teacher and principal absenteeism in highland areas (up to 48% for teachers and up to 70% for principals) is cause for much concern and critically damaging to the quality and credibility of education in rural and remote areas.

19 For a detailed discussion of this, see Jim Elmslie, West Papuan Demographic Transition and the 2010 Indonesian Census, CPACS Working Paper No. 11/1 September 2010, University of Sydney.
Significant efforts by the government to support the education program for the children and youth in the country have resulted in the provision of 20 percent of the government’s budget being allocated to the education sector in order to realize the target of achieving nine years of compulsory basic education. The Conditional Cash Transfer Program (CCT) as well as other scholarships such as BSM and subsidies such as BOS are targeting the poorest populations, and have been formulated to provide assistance to poor households and to improve their access to quality education. The PNPM and other programs have also provided assistance to communities to improve school buildings and related infrastructure. Despite these efforts, there are still 2.5 million children of between 6 and 15 years of age who remain out of school. The enrolment rate for JSS in the eastern provinces of Indonesia (Tanah Papua and NTT) is more than 20 percent below the national average. The situation is especially dire in the case of rural and remote areas. A recent study on Out-of-School Children (UNICEF and MoEC, 2012) shows that the probability of children being out of school in rural areas is twice that of children in urban areas. Furthermore, the dropout rate in rural areas is about twice that of urban areas for both primary and JSS levels and the completion rate in rural areas is 6.5% lower in primary school and 25% lower in JSS level.
More than 70 percent of the Papuan and West Papuan population lives in 3,600 villages and 90 percent of the villages are in remote areas. The school enrolment rate for rural students is 14 percent lower at the primary level and 33 percent lower at the junior secondary level than rates in the urban areas. Only 77 percent of village students enroll in primary school. At the junior secondary level, only 27 percent of village students enroll indicating that 50 percent of students in rural areas drop out after primary school while only 30 percent of students in urban areas drop out. There are various contributing causes for children not enrolling in school and poor performance among children in rural and remote areas. These include lack of facilities (no schools) and difficulty to access education facilities, inadequate quality of education (infrastructure as well as learning outcomes), teacher absenteeism and low teacher competence, and the poverty of the parents.\(^{20}\)

The changing government structures only compound these problems. The Population Census 2010 shows that as a result of decentralization and regional autonomy, the number of new districts in Tanah Papua have increased almost four-fold in the last decade, with the increase of 29 districts from 11 to 40. This has the effect of further limiting the capacity of provincial government to coordinate education and other public services in the provinces. The capacity of these new 29 districts to provide basic education service varies widely. The poor availability of basic data and the need to build capacity of government staff are real challenges that urgently need to be addressed.

Early Childhood Development: Kindergarten (TK) institutions, both public and private, have shown an increase from 364 TK in 2008/2009 to 411 TK in 2010/2011 with an average growth of 6.27%. Kindergarten students in 2010/2011 amounted to 26,229 children, resulting in 180,027 children not yet served by Kindergarten/Taman Kanak-Kanak institutions from a total population of 206,256 children.\(^{21}\) More children are therefore receiving early childhood education compared with three years ago but with only 12.7% of children 4 to 6 having access to ECD facilities (primarily concentrated in urban and semi-urban centers) the situation is dire. It should be noted here that in the targeted rural and remote areas, ECD is not only extremely important in providing children with the cognitive, social and emotional development at a critical development stage in their lives, but it also provides a valuable entry point for communities to develop the demand for sending their children to school.

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\(^{21}\) Source: Dikpora Office of Papua Province, 2012.
Elementary School (SD): Repetition and dropout rates in primary school/islamic primary school (SD/MI) remain a major issue, albeit it has decreased. Repetition rates decreased: 2009 (7.31%), 2010: (5.54%) and 2011: (5.57%). The dropout rate for SD in 2009: 5,722 (1.5%) and in 2010: 5,769 (1.44%).

Junior Secondary School (SMP): At JSS level, the repetition rate has fluctuated: 2009: 0.82%, 2010: 1.69% and 2011: 1.12%. At the SMP, the dropout rate has decreased in 2009: 852 (0.90%) and in 2010: 307(0.31%).

Although repetition rates among elementary and junior secondary school students declined, dropout rates, particularly at the elementary level, remain high. A Needs Assessment conducted in 2007 by IRD in two districts in Papua and two districts in West Papua, reported that the top ten reasons for primary and junior secondary school dropout being: (i) Distance from home to school, (ii) Teachers’ lack of commitment to education, (iii) Parents’ lack of support for education, (iv) Hunger, (v) Inability to Read at required grade level, (vi) Frequent student absences, (vii) Irrelevant curriculum and assessment, (viii) Competition with non-formal education, (ix) Economic hardship, and (x) Early marriage. The main reason given for dropout at the primary school level is students’ inability to read according to 5th and 6th graders interviewed in 6 di Jayawijaya.

Box 2. Papua and Irian Jaya Barat Basic Education Needs Assessment, International Relief and Development, January 2007

“At the junior secondary level, the major challenge is the distant location of junior high schools, which are primarily located in urban areas while the majority of students live in remote villages. The distance causes an array of problems such as lack of transportation, hunger, separation from family, and the need to work and live alone in the cities. The secondary reason for junior secondary school dropout is because students lack basic literacy skills and mastery of primary school subjects to be able to perform at the required grade level. Many school directors and community members interviewed stated that the reason students are unprepared for junior high school is because teachers’ lack commitment and a moral responsibility for educating students in primary school. As teachers are not paid well or regularly, they are frequently absent from school in the villages. When they do arrive, they are not motivated to teach. Consequently, students become unmotivated to learn or go to school. In some extreme cases, teachers only arrive to school at the beginning of the semester to register students and at the end to administer the national exam. Lack of teacher incentives, insufficient policies to enforce completion of all grades before taking the exit exam, and the absence of vigilance during the national exam allows teachers to help students pass the exam in exchange for bribes and enables students to effortlessly obtain a primary school certificate. Students in as early as 4th grade have passed the exam. When these primary school graduates arrive to junior high school unable to read, write or count, they feel ashamed and do not return to school. The same problem applies to junior secondary school in the villages. Therefore, SMP graduates are unprepared for senior high school.”


2.5 Guru Mangkir/Absen

Policy research and discussions have seemingly reached a broad consensus, at least among more industrialised countries, that teachers are the single most important in-school factor for student learning (Darling-Hammond, 2000; Hattie, 2003; OECD, 2005). This notion underpins recent efforts to define and unpack the idea of teaching (or teacher) quality (e.g. AITSL, 2011; MET Project, 2013). Like many developing countries, however, Indonesia faces a more fundamental challenge: many teachers are simply not in schools. For quality teaching to occur in the classroom, teachers must first and foremost be present.

The average teacher absence rate for Indonesia was estimated to be 19% in 2003 (Chaudhury et al., 2006), declining to 14% in 2008 (Toyamah et al., 2009). However, the incidence of teacher absence was

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22 Papua and Irian Jaya Barat Basic Education Needs Assessment, International Relief and Development, January 2007
23 When informants in Jayawijaya were asked, “What are the needs at your school or village?” the majority response was a library because of the high number of illiterate primary school graduates. See International Relief and Development, January 2007 (op.cit). p.14.
much higher in Papua and West Papua. A Study on Teacher Absenteeism in these two provinces\(^{24}\) found the overall rate of teacher absenteeism to be just over 33% or one in three teachers across Tanah Papua (Papua had the highest absenteeism with 37% compared to West Papua’s 26%). In other words “one in four teachers in the easy-to-access lowland schools were absent compared to one in two teachers in the highland districts”. Significantly, the rates of teacher absenteeism were highest in the districts zones in which the proportion of out-of-school children of school-age was also highest. It was also observed that half of the primary school-age children were not enrolled in school in these mainly highland districts. Absenteeism of teachers was found to be lowest in the urban sub-districts and higher in the rural and isolated areas, in other words the more isolated the school, the higher the rate of teacher absenteeism.\(^ {25}\)

In Figure 6, teacher absence rates in Indonesia and Tanah Papua are compared with those in other countries for which there are comparable data during this period.

![Figure 6. Teacher Absence Rates (%)](image)

Source: (a) UNCEN et al. (2012, cited in Suryahadi & Sambodho, 2012); (b) Chaudhury et al. (2006); (c) Das et al, (2007); (d) World Bank (2004); (e) Toyamah et al. (2009)

In Tanah Papua, the extremely high rates of teacher and principal absenteeism in highland areas (up to 48% for teachers and up to 70% for principals) is cause for much concern and with the sporadic learning of the children who do attend school, the absence of teachers is critically damaging to the quality and credibility of education in rural and remote areas. The data points to a failed system of accountability in the education system throughout Tanah Papua but especially in the rural and remote areas, contributing to higher student dropout in these areas.

In analyzing the factors that were found to influence teacher and principal absenteeism, a number of characteristics were associated with absenteeism/attendance:\(^ {27}\)

A. School and Teacher Characteristics
   - Teacher certification has not reduced the rates of teacher absenteeism although having a university degree is associated with lower rates of absenteeism among teachers.
   - Male teachers are more absent than female across all geographic categories.
   - Absentee levels for permanent /civil servant teachers (PNS) tend to be higher than for other teachers (honorary, contract, volunteer).
   - Teachers that live close to the school are more likely to attend on a regular basis.
   - Teacher in schools that are monitored more frequently (closer to the education office) have lower levels of absenteeism.
   - Teacher absenteeism impacts small rural-remote schools most severely due to an effective higher student-teacher ratio for early grade children, particularly in the highlands where STR can be above 1:40

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\(^{24}\) “We Like Being Taught”: A Study on Teacher Absenteeism in Papua and West Papua, April 2012, UNCEN, UNIPA, SMERU, BPS and UNICEF.

\(^{25}\) Ibid, p.6.

\(^{26}\) Sumber: (a) UNCEN et al. (2012, dikutip dari Suryahadi & Sambodho, 2012); (b) Chaudhury et al. (2006); (c) Das dkk, (2007); (d) World Bank (2004); (e) Toyamah et al. (2009)

\(^{27}\) UNCEN, h.7-11.
B. Teacher Welfare

- The most significant characteristic in this category that correlates to teacher absenteeism is the availability of teacher housing of acceptable quality.
- Incentive programs such as food assistance (lauk pauk) and special remote allowances have a strong positive influence on teacher attendance in school although not many of these incentives were found to actually reach the teachers in the difficult areas.

C. School Level:

- Effective School-based Management (SBM) has a positive impact on teacher attendance. Teacher absenteeism is strong related to the presence and use of teacher attendance books and other monitoring instruments as well as sanctions used in the school.
- Teacher absenteeism is strongly correlated to principal absenteeism particularly in the highland where 7 out of 10 principals were found to be absent. Schools with good leadership skills from the principals, not unexpectedly, had reduced teacher absenteeism.
- Schools in which the local communities were involved in school management processes including attendance monitoring, had lower rates of teacher absenteeism.
- School infrastructure appears to be helpful in promoting teacher attendance but only indirectly as it is itself dependent on the quality of school management.

D. Governance: Monitoring and Regulation

Teacher absenteeism is strongly related to the presence of effective local governance and administrative systems: government monitoring and the oversight of teacher management that is be exercised by some government education offices (regional and sub-regional) as well as the provision of incentives, is important for reducing teacher absenteeism.

A recent review of the impact of initiatives to reduce teacher absenteeism in developing countries classified initiatives into direct and indirect interventions. Indirect interventions, in which raising teacher attendance was not the main goal but was an expected secondary outcome under the programs’ theory of change, were grouped into four further categories. They are programs 1) aimed at increasing parental and community participation, 2) providing incentives to teachers linked to student achievement, 3) offering merit-based scholarships to students, and 4) tracking students by prior achievement.

Two direct interventions combined external monitoring of attendance with monetary incentives in the form of payment for number of days present (India) or bonuses based upon attendance (Peru) (Cueto et al., 2008, cited in Guerrero et al., 2012). Both interventions were found to substantially reduce teacher absence rates.

The Impacts of Interventions on Teacher Absenteeism: The impacts of the indirect interventions on teacher absenteeism have been mixed (Guerrero et al., 2012). Positive effects were found in a program aimed to increase parental and community involvement by giving parents decision-making capacities in El Salvador. Similarly, a scholarship program for girls in Kenya increased teacher attendance as well as improving student outcomes, possibly through increased parental involvement and monitoring of teachers. However, it is significant that other programs that aimed to increase parental and community involvement by providing parents with more/better information and programs that offered teachers incentives based on student test scores were not associated with increased teacher attendance.

Policies to reduce teacher absence in Indonesia mostly focus on improving teacher welfare. The largest current policy to target teacher welfare is teacher certification, but two studies – a World Bank study of

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28 Guerrero et al., 2012.
29 Duflo & Hanna, 2005
31 Kremer et al., 2009.
32 Guerrero et al., 2012.
33 Suryahadi & Sambodho, 2012.
3000 teachers across 360 Indonesian schools\textsuperscript{34} and the survey in Papua\textsuperscript{35}—suggest that teacher certification does not influence teacher absence. Similarly, an early assessment of the remote area allowance for teachers found that it generally has not yet had an impact on teacher absence.\textsuperscript{36} Data from the latter two studies, however, suggest that other complementary factors do influence teacher absence. In addition, new initiatives that combine incentives and monitoring in the Sota District, Merauke\textsuperscript{37} and nationally\textsuperscript{38} also show promise in reducing absenteeism given the findings of the systematic review.

### 2.6 Government Programs

Various strategies have been implemented by the government to deal specifically with the problems of education in rural and remote areas. These measures include models of schools adapted to the specific needs of the indigenous communities, including small schools, open JSSs, one roof schools, multigrade teaching, the use of mother-tongue for early grades, the equivalency education program, and boarding schools, scholarship programs for children of the poor; retrieval programs to bring out-of-school youth back into school, incentives for teachers serving in rural/remote areas; teacher training colleges for indigenous teachers; etc. Despite these interventions, the problems related to education access and quality still persist. Therefore there is an urgent need to assess current initiatives in terms of their implementation and impact and possibly to seek new initiatives - or to find ways of improving implementation - in order to improve education access and quality in the rural and remote areas.

#### Tabel 1. Supply Side Programs in RRAs

<table>
<thead>
<tr>
<th>Supply side</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Areas</td>
<td>School construction/rehabilitation</td>
</tr>
<tr>
<td>Low teacher qualifications</td>
<td>Teacher upgrading and certification</td>
</tr>
<tr>
<td>Remote Areas</td>
<td>Remoteness allowance</td>
</tr>
</tbody>
</table>

Among the diverse tools to address barriers and to improve access to basic education in rural and remote areas, the vast majority has been on the supply rather than on the demand side.\textsuperscript{39} However, successful programs affecting the demand-side of education provision in rural and remote areas have been introduced in the management and governance of education.

It is significant that many diverse interventions have been introduced by the national government to address the economic factors affecting demand for education; these have not been specifically targeted at the needs of rural and remote communities throughout the nation, and - most importantly - not to Tanah Papua where the need is greatest.

DBE\textsuperscript{1}\textsuperscript{40} has shown success on school development plans, transparency, and training of school management committees and establishing good links with local communities through village councils.\textsuperscript{41} However, the

\textsuperscript{34} De Ree, Al-Samarrai & Iskandar, 2012

\textsuperscript{35} UNCEN at al., 2012, cited in Suryahadi & Sambodho, 2012

\textsuperscript{36} Toyamah et al., 2011

\textsuperscript{37} West Papua Post, 2012; Radar Merauke, 2012

\textsuperscript{38} Akuntono, 2012; JPNN, 2012

\textsuperscript{39} See Global Initiative on Out-of-School Children: Indonesia Country Study, UNICEF and UNESCO, March 2012, p.92. These include JPS Scholarships, scholarships for poor students (BSM) Rice for the Poor (Raskin), unconditional cash transfer (BLT), the conditional cash transfer of the Hopeful Family program (P3N), National Community Empowerment Program (PNPM-Generasi), Kecamatan Development Program, Health Insurance Program for the Poor (Askeskin), and the school feeding programs of the WFP.

\textsuperscript{40} USAID’s Decentralized Basic Education Program (DBE1) started in 2005 and closed in 2011. Its main objective was to improve the management and governance of decentralized basic education at school and local government levels, leading to better and more effective school planning, budgeting, management, and school training of teachers.

\textsuperscript{41} Ibid. p.92
UNICEF-supported program, “Creating Learning Communities for Children”, or CLCC, that started in 1999 to support the government’s efforts to implement the school-based management program and achieved some success at involving local communities in school management and monitoring, was also not directed specifically at rural and remote areas and was not implemented in Tanah Papua.\(^{42}\)

Statistics on school construction, facilities and teacher qualifications show patterns of “slow progress.” Given the current rate of development, decades will be required to reach the present national standard of educational performance. Furthermore, the equity gap is likely to increase during this period as progress remains imbalanced between the urban and rural sector, and the rural sector, particularly rural and isolated regions falls further behind.

Despite the numerous government programs to address these serious education challenges, there has been little improvement in the status of education in the two provinces. Significantly, in the IRD Survey of 2007 stakeholders questioned in response to the question, “Why do development projects fail?” responded that it was because the government chiefly focused on the provision of infrastructure (school buildings and facilities), not on the capacity development of teachers. The one common need throughout all regencies visited is the need for teacher training regardless of good or poor teaching capacities.

The Provincial Education Office in Papua recently observed that education has not yet reached optimal levels of performance and much more remains to be done. The rate of illiteracy continues to increase, large portions of children in the remote and isolated areas do not attend school, and despite national policies on the location of schools, there are still more than 1,400 villages without elementary schools. And, while the rate of absence of teachers and principals is high overall, the difference between urban and isolated areas, is dramatic.

Educational progress in West Papua shows a very different pattern of inequity. Although the rate of illiteracy in West Papua is not as high as in Papua, the equity gap in terms of poverty and the country’s Human Development Index between the urban and remote sectors remains high and continues to grow. One of the biggest challenges to education development in West Papua is the availability of schools within a reasonable distance to a large portion of the school-age children in the province. According to Article 1 of Government Regulation No. 19/2005 line 1: the 'National standard is the minimum criteria on the education system in all of the legal area of the Unitary State of Republic of Indonesia.' Yet, West Papua is far from realizing the national standard.

The constitution of Indonesia states that “each citizen is obligated to attend basic education and the government is obligated to fund it.”\(^{43}\) Article 7 of Government Regulation No. 38/2007 line 2 goes on to state that education is the obligatory function of the provincial and the district/city governments. However, the manner in which the two levels of government cooperate to ensure a quality education for all remains a challenge in Tanah Papua, particularly for those in hard to access areas.
In other parts of Indonesia, the number of indigenous population in rural and remote areas is considerably smaller than the population of non-indigenous who live in urban and semi-urban areas. For Tanah Papua, however, the indigenous Papuans living mostly in scattered rural and remote locations are in the majority; 77 percent and 64 percent in Papua and West Papua respectively (BPS, Census 2010).

Because contact with the outside world was extremely limited until the mid-twentieth century, the culture of the indigenous people in these provinces differs markedly from the non-indigenous Indonesians in the region, often causing a marked contrast between the culture of the community and the culture of the school, (particularly related to the relevancy of the curriculum, language of instruction, and its climate of discipline) as well as the structure of the government bureaucracy within the education administration that are more suited to urban service delivery than to the rural, remote and isolated locations of small scale subsistence farming, hunter gatherers and nomadic groups.

Various definitions and typologies of rural and remote village locations exist. The “affirmative education” model proposed by the Provincial Education Office of Papua presents a four-zone: urban, peri-urban, remote and isolated (see below).

The Directorate General of Human Settlement of the Ministry of Public Works\(^{44}\) has provided definitions, criteria, parameters and scoring tools for classifying remote village locations in Indonesia. Here, the classifications relate to “backward or lagging behind” settlements or small islands. The typology of these settlements is classified according to type of settlement area, accessibility facilities (such as roads, bridges, and harbors), distance from a center of development, and geographical isolation in terms of rivers, mountains, valleys, etc. This classification leads to a typology based on four types of location: (i) remote settlements “due to non-existing accessibility facilities”; (ii) remote settlement due to geographical distance from centers of development; (ii) remote settlements due to geographical isolation; and (iv) remote settlements due to “particular reasons” e.g. the influence of traditions resulting in “self-isolation”. On the other hand, SIL-Indonesia maps communities not according to administrative criteria but according to its linguistic surveys: by the size of communities and the language/s they speak. SIL-Indonesia defines “a remote indigenous community” in terms of a community which only speaks its one language and “mother-tongue speaking communities” as those whose members can speak a limited form of basic Bahasa Indonesia.

\(^{44}\) Directorate General of Cipta Karya (Human Settlement) of the Ministry of Public Works, Technical Guidelines.
The Presidential Decree (No. 65, 2011) on the “Accelerated Development of Papua and West Papua Provinces” specifies the detailed and priority multi-sector plans for the provinces from 2011 and 2014 including the undertaking of the revitalization of education services covering all villages to prepare qualified human resources for the future of the provinces. The Decree covers isolated, rural, urban and “strategic” areas. The education service program prioritizes the enhancement of teaching-learning activities, mainly to ensure that these can take place in all villages with adequate facilities, number of teachers as well as preparing for vocational education.

The education authorities are conducting a number of initiatives based on the Presidential Decree on traditional remote communities (KAT). These interventions include work with households that are identified as falling into the category of KAT. These are generally communities that are hunters and gatherers, or shifting cultivators. To date, 33,097 households in 431 locations in Papua, and with 6,475 households in 116 locations in West Papua have been identified. Another characteristic of members of this KAT category is that they usually have no officially-recognized permanent address and have no citizen identification cards, resulting in little or no access to health or education services, including welfare transfers such as Conditional Cash Transfer Programs (PKH), scholarships for the poor, health insurance for the poor.

Development of isolated areas focuses on “mountains located in the middle, state borders, disadvantaged areas, coastal areas and outmost small islands”. Rural areas focus on “village locations based on local natural resources”. Urban areas have “urban functions”. Development of “strategic areas” shall focus on “locations having natural resource potentials, which value can be enhanced, skilled human resources, adequate areal infrastructure to support investment based on local economic potential, as well as synergized with MP3EI within the economic corridor of Papua-Maluku islands.”


PKH - The Program Keluarga Harapan (PKH, Hopeful Family Program) deals with several aspects of development such as school attendance and health visits. Although its aim is to increase human investment for the next generation rather than to target women, the PKH...
(Jamkesmas)\textsuperscript{48}, the food subsidy program (Raskin),\textsuperscript{49} etc. Inclusion of these communities in the category of KAT is critical for these groups to access public services and social protection. However, the majority of villages in Tanah Papua are not included in this category. Because populations in these villages are not nomadic but relatively settled and practice more intensive farming systems, they are generally defined as belonging to “rural and remote villages”. These critical issues of “categorization” need to be addressed in order to explore ways to overcome the challenges of providing education services - and other public services - to these poor and underserved population groups.

3.1 Zoning according to the Human Development Index

BAPPEDA has also urged donor partners not only to target this low HDI zone, but also to ensure that programs are shared with local education offices (District Dinas) in order to build human capacity and mainstreamed and taken to scale by the local government rather than kept as isolated projects which remain unsustainable after project completion. Sharing and disseminating experiences and results is particularly important for ensuring successful strategies are incorporated into the drafting of the RPJMD (5 year development planning) in the development of the RENSTRA.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure_8_HDI_by_District_Papua_Province}
\caption{HDI by District, Papua Province}
\end{figure}

Source: BAPPEDA Provinsi Papua, 2013

places women in a unique position as the allowance recipients. (See Hutagalung, Sirojuddin, and Widjajanti, (SMERU) in SPA Working Papers, 2009.

48 Jaminan Kesehatan Masyarakat, or Jamkesmas, is a Ministry of Health -run “insurance” program which now targets over 76.4 million of the poorest poor Indonesians.

49 The Raskin program (Beras untuk Rumah Tangga Miskin, or “Rice for Poor Households”) has the objective of helping poor households access food. Under Raskin, 15 kg of rice per month per household is transferred to poor households (targeting is based on economic classifications on data from the National Family Planning Coordinating Board), covering approximately 17.5 million poor households across the country.
3.2 Mapping of Schools

In West Papua, the location of existing schools and the identification of villages without schools are generally already known. However, in villages where yayasan schools are already established, there is not a need for building a new government school. In Papua, the information on the number of villages without schools comes from population data on the number of villages and the number of elementary schools. The location of the schools, their condition, and the identification of yayasan schools exist for a large portion of schools that are concentrated in urban and semi-urban areas. However, information on remote and isolated schools and communities without schools is less reliable and there has not been a comprehensive effort to integrate the current state of knowledge to get a multi-dimensional picture (e.g. location of schools by language and ethnicity or tribe).\(^{50}\)

In addition, simply creating an inventory of schools is insufficient to ensure the provision of education services in the rural and remote areas. Additional factors must be included to address situations such as when adequate school buildings are in evidence, but teachers are absent.\(^{51}\) Therefore, data such as teacher and principal qualifications, attendance rates, net enrollments, grade repetition, school drop outs, etc., must also be included in the school mapping research. Additionally, the relevance of the curriculum to the local culture and the language of instruction are related to the quality of education and have consequences for student learning, retention, and transfer rates to junior secondary school. Therefore, language and culture of the community and the educators should be included as well (see, for example Chapter 7 on Language Issue in Tanah Papua).

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50 Many of these and other suggestions on the dire need for school mapping were presented and discussed in a workshop supported by UNICEF and ACDP in Jayapura, Papua, from 5 to 7 November, 2012.

51 One team of Workshop participants visited a remote area (Towe Hitam in Keerom District) where buildings and adequate instructional materials were provided with little evidence of the presence of teachers or students.
While geographic designation assists in distinguishing the challenges faced by certain schools, their location does not ensure that issues such as availability of transportation, the cost of transportation, communication systems, and availability of electricity are adequately considered when classifying a school. Again, as noted in the Workshop, such nuanced designations are essential for planning, and for improving teacher attendance.

Understanding the diversity of social patterns of behavior that includes language and culture, levels of acculturation, market exchange, inter-tribal association and alliances, inter-tribal competition and conflict, religious affiliations, and the availability of curriculum materials in mother tongue are additional factors that should be included in decision-making on the nature of educational intervention required for specific areas.

3.3 Education Foundations (*Yayasan*)

The existence of faith-based organizations (NGOs) in Tanah Papua is well known. Yayasan Pendidikan Kristen (YPK), Yayasan Pendidikan Islam (YAPIS), and Yayasan Pengembangan Pendidikan Katolik (YPPK) – just three of the many local Yayasan - were established during 1960s and 1970s. These organizations provide services through units down to school and community level both in urban and rural/remote areas. YPK for example, manages 553 schools in Papua and 201 schools in West Papua, of which around 75% of the schools are in rural and remote areas. Around 90 percent of these YPK, YPPK, and YAPIS students are indigenous Papuans.

Within Papua, each educational *Yayasan* is supported by a specific religious body. The Yayasan Agama Islam (YAPIS) is supported by Muslims, the Yayasan Pendidikan Advent (YPAC) is supported by the Adventist Church, the Yayasan Pendikan Kristen (YPK) is supported by the Gereja Kristen Indonesia (Christian church), the Yayasan Pendidikan dan Persekolahan Gereja-Gereja Injili (YPPGI) is supported by five different Evangelical Protestant churches and the Yayasan Pendidikan dan Persekolahan Katolik (YPPK) is supported by the Roman Catholic Church. These five religious groups and their Yayasan dominate the field of private education in Papua. Although the five Yayasan are not the only ones operating in the province, they account for over 95% of the private rural and remote schools under consideration in this study, and Papuan Law No. 21/2001 concerning Special Autonomy specifically accommodates these five yayasan as the primary partners in implementing private education in Papua.

As part of this Strategic Planning study, a survey was conducted by SIL on five major yayasan operating in the Province of Papua.52 The full report is given in Volume 2. The review entailed a SWOT (analysis of the Strengths, Weaknesses, Opportunities and Threats) that emerged from the yayasan dominant in the field of education in Papua. The Strategic Plan builds on this information and suggests that the role of the *Yayasan* be clearly acknowledged as an integral part of the strategy for providing a quality basic education for rural and remote areas.

District and Provincial Education Offices should coordinate closely with these NGOs and ensure that the government resources supplement yayasan resources whenever necessary. Their main strength is the willingness to commit resources to the poorest and remotest communities and build strong relationships with local communities but insufficient funds, land disputes resulting in disturbances in the communities, lack of transparency in the way local governments deal with them, and lack of government interest and follow-up on progress reports, all indicate an urgent need for local and provincial government to coordinate and support these vitally important agencies. The quality of any *yayasan* school depends on the quality not only of the infrastructure and instructional materials but primarily on the quality of the teachers. Almost all the teachers in the major religious yayasan schools are government teachers and one of the major weaknesses identified by the yayasan is the inability to select or be involved in the selection of their teachers.

The SWOT analyses present an excellent opportunity for the government to recognize the strengths and opportunities of the yayasan and address the weaknesses and threats that create obstacles for reaching these otherwise undeserved communities.

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52 See Volume 2: SWOT Analysis of Papua Education NGOs, Joost Pikkert, 2013.
Chapter 4
The Teacher Training Colleges (KPG) of Tanah Papua

4.1 Introduction

The Teacher Education College or Kolese Pendidikan Guru (KPG), an institution that is unique to Tanah Papua, was established because the region is socially, culturally, demographically and geographically unique. The KPG was established by the provincial government of Papua in 2002 and West Papua in 2006 to address the lack of training and education provision for teachers and due to the demand by teachers and education administrators in Tanah Papua. The KPG enroll students who have graduated from junior secondary school. It is an integrated senior secondary school or “one-roof” school in which a 3-year SMA program is integrated into a 2-year teachers’ college preparation program, preparing students for a D2 diploma in elementary school teacher training (UPP PS D2 PGSD) for which the Faculty of Teaching and Education (FKIP) at Universitas Cenderawasih (UNCEN) is the accreditation authority. The KPGs did not originally use the national SMA curriculum; therefore, their graduates had to take a Package C Equivalency Exam to qualify to pursue higher education after KPG. However, the SMA curriculum was later adopted, and students now study for the National Examination (UN).

The curriculum therefore spans a five year course of study that includes curriculum for a high school and a teacher’s college (instead of just a 3 year high school). The purpose of the curriculum is to train junior high school graduates, giving them a high school education while concurrently training them to become teachers to serve in the remote communities of Tanah Papua. The major mandate of the KPG is to fast track the creation of elementary school teachers for small elementary schools in remote and rural Tanah Papua. Graduates are meant to achieve both a high school diploma and a two-year teachers’ college diploma over an intensive 5-year period. While as a high school diploma program, the KPG technically and financially report directly to the Head of Education and Culture Office in Papua, practically, their accreditation as a two-year diploma college gives the state university (Universitas Cenderwasih/UNCEN) responsibility for setting and controlling the curriculum. However, this has occurred within a context of considerable confusion regarding the regulatory framework underpinning the establishment of the KPG and over the allocation of responsibility for determining curriculum, monitoring, providing quality assurance and issuing certificates. The confusion is the result of the apparent overlap of responsibility between DIKTI (i.e. UNCEN) and the MoEC (i.e. the Education and Culture Office in Papua): the three year high school diploma programs are meant to fall under the responsibility of the DG of Senior High School, MoEC; while two year diploma colleges fall under the responsibility of DIKTI (and therefore UNCEN) as well as under the management of MoEC. The distinction between management of the KPGs and curriculum, accreditation and quality assurance is poorly understood and leads to this confusion as to who in fact “runs” the KPGs.

KPG aims to produce professional SD teachers (especially indigenous Papuans) who are able to adapt to communities, with unique local natural and cultural characteristics, especially in Tanah Papua’s rural and remote areas in dire need of teachers. Lack of teacher supply and the poor performance of existing teachers, including high absenteeism, has become one of the main obstacles facing education delivery in
Papua and West Papua. The findings of the UNICEF supported research conducted in 2012 underscores this: more than one in three teachers in Papua and West Papua were absent from school during school hours.

The provincial government of Papua originally established the KPG as part of the strategic education development program aimed at preparing a skilled and reliable human workforce in Papua for the future. There are four KPGs in Tanah Papua, namely, KPG Nabire, Mimika, Merauke (in Papua Province) and Sorong (in West Papua Province). The KPG has become popular among students wanting to become teachers or education workers. Both Papua and West Papua governments spend IDR 15-20 million for the tuition of each KPG student. The instructional period in KPG is five years, during which the first three is equivalent to education in vocational school and the next two is for diploma education (D1 and D2). The overriding objective of the KPG is to promote the education of students dedicated to becoming teachers -- to teach and guide them in developing the appropriate knowledge, skills and attitudes that will enable them to teach in Papua, especially among the underserved indigenous communities in rural and remote areas.

However, since the KPG commenced operation, there has not been a study conducted to evaluate the quality and effectiveness of the graduating teachers in the schools, nor to evaluate the relevance and effectiveness of the curriculum used to prepare graduates for teaching. This chapter will borrow heavily from three studies that were commissioned specifically to provide information on this: (i) “The Kolese Pendidikan Guru: Language Curriculum Review of the Indigenous Teacher Training Colleges (KPG) in Papua, Indonesia.” Joost Pikkert, SIL Indonesia, 2013; (ii) “Tracer Study Report on Graduates of Kolese Pendidikan Guru (KPG) Sorong” UNIPA 2014; and “A Tracer Study Report on the KPG in Papua” UNCEN 2014. The three complete reports are to be found in Volume 2 of this Strategic Study Report. These studies provided a SWOT analysis of the KPGs, the results of tracer studies conducted of the alumni - both those who became teachers and those who chose not to, the identification of the location of the schools to which teachers were posted and the effectiveness of the KPG training in preparing teachers for teaching in the communities to which they were posted.

4.2 The Legal Status and Regulatory Framework for KPG

The Special Autonomy (Otsus) Law for Papua, Number 21 of 2001, states explicitly that the Papua and West Papua provinces are to be given broad opportunities to manage their human and natural resources as well as the flexibility and authority to draft special regional regulations in order to improve the service provision and welfare of the Papua population. Article 56 (lines 1-6) states that education is one of the main priorities of the Otsus Law and that the regional governments of Papua and West Papua should provide special attention to the education sector by allocating special funds for education service in Papua.

Furthermore, Law 20/2003 on the National Education System states that the society has the right to conduct community-based education, both formal and non-formal, according to the religion, social and cultural condition for the benefit of the community. Law 20 also mentions the provision of special education services for those living in isolated or remote areas, remote indigenous communities and/or those affected by natural and social disasters and poverty.

Several national and local policies included in laws, decrees and regulations were noted by the UNCEN and UNIPA studies as being contradictory and therefore detrimental to the mission of the KPG. The legal basis for the KPGs in Tanah Papua is provided in the following laws, decrees and regulations:

1. Law 21 of 2001 on Special Autonomy
2. Law 20 of 2003 on the National Education System
3. Law 14 of 2005 on the Teacher and Lecturer
4. Papuan Provincial Regulation or Perdasi No. 5 of 2006 on Education Development in Papua Province
5. Decree of Minister of National Education No. 107/D/O/2006 of 2006 on Establishment of Four Program

53 The UNCEN Tracking Study found, for example, one school in Mappi District where teachers had been absent and learning had not taken place for three weeks. UNCEN, p. 49.
54 UNCEN, UNIPA, BPS, SMERU and UNICEF, 2012, A Study on Teacher Absenteeism in Papua and West Papua
55 A SWOT Review includes Strengths, Weaknesses, Opportunities and Threats
Implementation Units (UPP) for D2 PGSD Study Program in Universitas Cenderawasih in Papua Province

6. Decree of the Head of Education, Youth and Sports Office, Papua Province No. 188.4/2671 of 2009 on Establishment of Teacher Secondary School/Plus Secondary School (Teacher Training College) in Four Locations in Papua and West Papua Provinces

7. Law 12 of 2012 on Tertiary Education

8. Ministerial Decree 49 of 2014 on the National Standard for Tertiary Education

It has been noted that number 5 above (the Ministerial Decree or SK Menteri) and number 6 (the Decree of the Head of Education Office of Papua, regarding the establishment of the one-roof school KPG) has caused uncertainty in the terms and management of KPG. This uncertainty has led to confusion over whether KPG falls under the management of the Education Office or FKIP UNCEN. These two decrees on affirmative policies influenced the structure of KPG. Decree (SK) No 188.4/2671 on “Establishment of Teacher Secondary School/Plus Secondary School (Teacher Training College) KPGs in Four Locations in Papua and West Papua” was issued by the Head of the Education Youth and Sports Office in Papua in 2009 and differs significantly in content from decree No. 107/D/O/2006 on “Establishing UPP PS D2 PGSD”, issued by the Minister of National Education three years earlier (in 2006). While decree 188.4/2671 mentions a combining senior secondary school and a two-year Diploma program, Decree 107 uses the term “KPG” to refer only to two-year Diploma program schools. Decree 107 was the result of intensive consultations between the Ministry of National Education and the Government of Papua Province and mentions neither senior vocational school for teachers nor Senior High Plus schools. Decree 107 establishes only a “UPP PS D2 PGSD” program, not actually a combined three-year SMA-cum-UPP PS D2 PGSD program. Establishing the combined KPG program was the initiative only, it would seem, of the Education Office of the Government of Papua.

The difference between the content of these two regulations has created considerable ambiguity and uncertainty as to the legal status of the KPG, which is unique as an institution that integrates an SMA with a diploma in elementary teaching. The uncertainty also causes the status of the Universitas Cenderawasih (UNCEN) to be called into question. Since the KPG incorporates an SMA program, it falls under the regulation of the MoEC and its Provincial Office. This, in effect, grants significant autonomy to the KPG in academic, administrative and financial processes. However, as mentioned, because the KPG offer a two-year (D2) program, these schools fall under the responsibility of both MoEC, which is the academic accreditation authority for the D2 diploma, as well as UNCEN, which claims responsibility for setting and controlling the curriculum. Overall, UNCEN is perceived as having been relegated to the status of academic “mentoring”, impacting on the quality assurance and academic activities of these institutions.

The central Government policy, Law 14 of 2005 on Teachers and Lecturers, which selects candidate teachers for admission to the civil service (CPNS), stipulates an S1 degree or a Diploma 4 as a prerequisite for selection to the CPNS. Law 14 is not aligned with the regional government’s policy that seeks to address the issue of the lack of teachers in the regions, since the KPG, which were established for the specific purpose of overcoming this shortage of teachers, offers only a D2 (diploma) program. Thus, teachers graduating from KPG cannot become civil servants except by upgrading their qualifications to S1 level.

The lack of a clear regulatory framework has led to the KPG working in comparative isolation from the Provincial Office of Education and Culture as well as from the accrediting university, UNCEN. The UNCEN study reports that the Education and Culture Office has neither conducted any monitoring and evaluation in terms of KPG management nor monitored the attendance or performance of the KPG graduated teachers in the schools to which they have been posted.56 Similarly, no incentive schemes have been provided for these teachers to promote their working in remote and rural areas. Although absent to date, such incentive schemes could provide funding for food, transport and health costs, or for career development such as upgrading qualifications, admission to the civil service, or accelerated promotion.

The UNIPA Study also underscores the uncertainty concerning asset management and student recruitment at the KPG (see Box 3). It is unclear whether the colleges are responsible for managing assets themselves, if they are required to report to the District Education Office where the KPG is located and which then reports to the Provincial Office of Education and Culture, or, in the case of Sorong KPG, if they should be required

56 Studi ini dilakukan atas permintaan Dinas Pendidikan, Pemuda dan Olahraga (DIKPORA) yang sekarang baru saja berubah menjadi Dinas Pendidikan & Kebudayaan.
to report to the Sorong District Education Office. For example, in the case of Sorong, the understanding is that the KPG comes under the administrative management of the Secretary (SEKDA) of the Sorong District Education Office. However, no clear line of responsibility has been established, resulting in the neglect and abandonment of new land and construction for the KPG, and with tools, furniture and equipment now having disappeared.

It is significant that in the draft Special Local Regulations (Perdasi) of West Papua province, KPG is not mentioned, whereas in the equivalent Perda of Papua province 2/2013, there is an explicit mention of KPG (General Provisions Article 1 point 37, and the regulations pertaining to the qualifications of KPG educators in Article 45, point 4). The UNIPA Study finds that according to the Education Office in West Papua province, the reason for the absence of a mention of KPG in the West Papua Perdasi is because there is an expressed demand for teachers with S1 qualifications (Bachelor degrees) in West Papua province rather than for teachers from diploma-awarding vocational schools such as the KPGs. As it stands, the draft Perdasi therefore serves to undermine the KPG even further and there is a fear that without clear and affirmative policies delineated in a strong regulatory framework, KPG Sorong faces the threat of further neglect and eventual closure.

4.3 Teacher Recruitment

Even though the demand for teachers is very high in both provinces, a minimal number of KPG graduates have been recruited as civil servants. For example, in Sorong regency, during school year 2013/2014, there was a shortage of 269 teachers. However, the process of recruiting KPG graduates as teachers has been effectively blocked by the policies issued by the central government such as the decree of the Minister of State Personnel (MenPAN) and also the joint decree by three ministers stating that teachers can only be recruited if they have completed their S1 study. For example, Law 14 of 2005 on Teachers and Lecturers, Article 9, states that teachers must possess academic qualifications through the tertiary education program granting a bachelor degree and the program for diploma four (D4). Respondents in the UNIPA survey of KPG-graduated teachers considered the local government as not to be fulfilling its commitment to appointing KPG graduates as teaching staff to fill the vacancies. However, it should be noted that during the interview and focus group discussions (FGD) with the Education Office of Sorong regency, it was stated that no such commitment had ever been made to recruit KPG graduates as teaching staff. It seems that the original mandate of establishing the KPGs to produce elementary teachers to cater to the special circumstances of the remote, rural, and isolated areas of Tanah Papua has been disregarded in light of the national policy of recruiting only S1 level teachers.

Sorong KPG suffers perhaps more than other KPGs because its status has called into question after the bifurcation of Papua province into the two provinces of Papua and West Papua and has left Sorong (located in West Papua) without clear lines of management and leadership. Sorong KPG is currently in a perplexing situation in which it is experiencing a crisis in leadership, with dual responsibility being claimed by the current KPG director, who was appointed by the Regent under the Decree of Regent dated 11 March 2010, and by FKIP UNCEN in Jayapura, which was the accrediting faculty at the time of the bifurcation of the provinces and appointed the Principal of PGSD located in Aimas.

Also, underscored in the UNIPA Survey, the KPG are experiencing an apparent lack of attention from the Province and Districts, which send their students to the institution to train as teachers, most likely due to the lack of monitoring and evaluation and reporting. One symptom of this neglect is the lateness in payments. Payments are being delayed until the third year, which results in the KPG in Sorong, for example, being considerably in debt for the first and second years. Several districts have not paid for their students at all. Such actions are highly questionable and irregular since each student studying in Sorong KPG comes from districts in West Papua in compliance with a Decree from the District that ensures each student is carefully selected, identified and therefore monitored. However, during UNIPA’s field survey and interview with the Head of Education Office, it became sadly apparent that the graduates of the KPG were not being monitored and were even unknown by the districts that had sent them for training.

57 Additionally, the circular letter by the Minister of State Personnel (Menteri Pendayagunaan Aparatur Negara/MenPAN) on teacher recruitment stated that there is no allocation for D2 (PGSD) and KPG graduates, only for S1 graduates.

58 Most disturbingly, an order letter was issued to put a stop to KPG activities, empty the Rufei dormitory, and not to accept student enrollments for school year 2013/2014.
Box 3. Confusion in the Regulatory Framework and the Effect on Recruitment to Sorong KPG

Since Academic Year 2010/2011, districts in West Papua (excluding Sorong regency itself) have stopped sending their selected students to study in KPG Sorong. According to the opinion of Heads of Offices and key informants during the UNIPA Study, there are several reasons for this:

1. A recommendation is required from the local District Education Office for students to be admitted to KPG Sorong. After applying directly to KPG Sorong, several parents have been asked to return to their local area and report to their local Education Office to obtain these recommendations. Such recommendation is also required to include a commitment to funding students wanting to study in KPG Sorong (as much as IDR. 20 million per student per year). However, since 2012, the districts that send students have discontinued payment, and this has been perceived as not only being against parental will to provide education to children but also in contravention of the affirmative education policy in Tanah Papua. As a result of the failure of districts to finance selected students to the province’s only KPG, student numbers have decreased significantly compared to previous years. In 2005/2006 there were 56 students, and this increased to 119 students in 2006/2007. As a result of the cessation of district payments, there has been a significant decrease in recent years: in 2012/2013, student numbers dropped to the lowest ever (23 students).

2. Since the KPG awards the equivalent of a D2 diploma, it is incumbent on local Education Offices to send KPG graduates to continue their studies in S1 (Bachelor programs) in order to be accepted as teachers, according the national Teacher Law No. 14/2005. There is therefore an inconsistency between the national law and the Special Autonomy Law No. 21/2001 which would otherwise permit the recruitment of teachers at D2 level to fill vacancies at rural and remote schools in the province.

3. The status of the KPG has still not been clearly established. It is unclear whether it belongs to the Papua province, West Papua province, or the Sorong district. Legally, it would seem that each KPG is the property and responsibility of each Provincial Education Office and, if so, the KPG Sorong should be the property and responsibility of the West Papua province. To date, the three KPGs in Papua province - Merauke, Nabire and Timika - are managed by Papua Provincial Office of Education and Culture. Without a clear regulatory framework, governance structure and aligned policies to promote the interests of children in rural and remote areas of Tanah Papua, the KPG Sorong will face imminent closure.

4. An evaluation of the quality of KPG graduates who are now teaching and teaching in RRA schools has yet to be conducted. A formal monitoring and evaluation mechanism should be in place to ensure quality and provide feedback to the KPG and accrediting university.

5. There seems to be little or no coordination among the variety of institutions that serve to train teachers in the province. In addition to KPG Sorong, there is already an Academy of Teaching and Education (Sekolah Tinggi Ilmu Keguruan dan Pendidikan or STIKIP) in specific regencies, such as Fakfak, Manokwari and Sorong. STIKIP in Sorong in 2013 had the largest number of students (384 students). STIKIP Muhuammadiyah in Manokwari had 63 students in each of its 5 different courses.


Although the annual per capita cost of training each student at the KPG Sorong is IDR 20 million, the attention and commitment of both the district and the provincial government is very lacking. KPG Sorong belongs to the West Papua province, yet it lacks attention from the provincial government and has even come to be considered a burden on the provincial Education Office.

59 This cost includes dormitory accommodation, transportation and other learning needs
4.4 KPG Location, Infrastructure and Facilities

For the location of the three institutions in Papua already reviewed by SIL, see Map 2. KPG Nabire is located approximately 15 kilometers outside of Nabire City. The facilities are clean and the institution was able to provide a comprehensive report profiling the school, its student body, curriculum and faculty. KPG Mimika is located roughly 10 kilometers outside of Timika and has a campus with a “community feel” centered around a café which the students themselves, through their Life-Skills Curriculum, have constructed. Around the central square are gardens and livestock that the students maintain. KPG Merauke is located outside the Merauke city limits on a piece of land that is mired and sinking into the swamp.

Map 2. Locations of KPG Institutions in Papua Province

KPG Timika, Nabire and Merauke are all located in Papua province while KPG Sorong is located in West Papua. Although the majority of the Papuan community lives in the highlands, the four KPG are all located in the coastal areas. The distribution of KPG graduates is expected to meet the needs for teachers in the groups of districts matched to each KPG.

At the time of the SIL visit, the central square of Merauke’s campus resembled a swamp and some of the floors in the building were visibly sinking to such an extent that they could no longer be used as classroom facilities. A large new faculty building and bathroom facility were being built but dormitories were largely vacant, with only about one third of the rooms occupied.

According to UNCEN’s study, infrastructure, facilities, amenities and educational tools used for teaching in KPG Merauke, Nabire and Mimika are incomplete. Furthermore, language and science labs have not been used to the maximum due to the lack of professional instructors able to operate all the equipment. KPG Merauke lacks some important facilities for developing quality graduates such as a functioning library, a garden for practicing agriculture and farming and facilities used for practicing microteaching. Furthermore, the natural science lab is not yet functional and lacks a laboratory technician.
According to UNIPA’s study, the condition of the Sorong KPG facilities and infrastructure are discouraging; the roof leaks, the windows are broken and the facilities are inadequate. Even though a new school has been provided 38 km. away from the existing site, there is still uncertainty of the school’s status because it was handed over to the locally stationed army battalion to temporarily house their squad. See also Box 3 on administrative problems related to student intake.

4.4.1 Library Resources Supporting the Curriculum

The libraries in the three KPG surveyed by SIL were found to be woefully inadequate for the purpose of encouraging students to read for pleasure, academic study, or interest in the language and culture of the rural and remote areas in which they were to teach. 95% of the books in the library consisted of used textbooks. 5% of books that were for pleasure (fiction and non-fiction) were locked up and unavailable. There were no resources for research, no books on Papuan culture or Papuan languages and no other supporting resources for supporting research in other subject areas, i.e., geography, history, social studies, etc. There were also no newspapers or magazines, and there were no benches or chairs for students to sit in and read. The desks that should have been occupied by the librarian were piled high with books and covered by a layer of dust.

These KPG institutions have a critical role to play in inculcating in their student teachers a love of reading and desire for knowledge and leaning, without which these teachers can offer no help in transferring such values to students at the schools in which they will eventually be teaching. The KPGs are failing woefully in this and this has major implications for the teaching of literacy skills, and learning in general, in schools in rural and remote areas.

4.5 The Education Curriculum

According to UNCEN’s study, the curriculum used in D2 schools such as the KPG is a combination of the national curriculum and the institutional UPP PS PGSD curriculum. The five main subjects in the national curriculum include: (i) personal development, (ii) community living, (iii) knowledge and skills, (iv) working skills and (v) working attitude. Three additional main subjects are included in the UPP PS D2 PGSD curriculum to develop the skills students will need once placed in schools within the target communities. These subjects include teaching method, mentoring and PPL.

The mentoring aspect of the curriculum is meant to develop life skills so that alumni can become community teachers by transferring these life skills to the local community in which they teach.

According to UNCEN’s Study, the survey respondents had many positive perceptions of KPG and skills acquired there. Several respondents believed that skills learned at KPG were being successfully applied in the classroom. 88.2% of graduates who participated in the survey from KPG Mimika, Merauke and Nabire believed these KPGs equipped their graduates with ‘sufficient skills and knowledge’. This finding would appear to contradict the observations from the SIL and UNIPA Studies. The degree of confidence of the KPG-graduating teachers in the effectiveness of the curriculum of the KPG in preparing them for teaching in the remote and rural areas, has to be looked at with some caution.

It would seem that the curriculum taught in the KPG is predominantly a national curriculum that is essentially neutral in terms of the Papua cultural and linguistic context. It would therefore not be surprising that the graduating teachers would apply much the same pedagogic model to their own classrooms and possibly consider their training as having equipped them with the adequate pedagogic skills. It is significant that one main weakness of the KPG curriculum that was listed by the graduates was that there were no specific skills given to teachers in the local language used by the community in which graduates would be assigned to practice teaching. The 11.8% of graduates who did not believe that the KPG adequately equipped graduates with the needed skills cited the reason for this perception as their opinion that KPG alumni needed more life skills related to actual conditions in the field. According to these graduates, there was a gap between the curriculum applied in KPG and the actual problems encountered in the field. This gap caused alumni to face difficulties when assigned to remote areas, especially concerning language, geographical conditions, location accessibility and the local community culture.
However, according to the UNCEN study, 48% of the KPG alumni also acknowledged that, unlike the current situation, a large proportion of the KPG curriculum and learning activities should specifically prepare alumni to be assigned in remote areas (Figure 10). This request seems to be more important than suggestions for improving facilities and amenities (36%) and extracurricular activities (16%), see Figure 9 below.

![Figure 9. Perception of Alumni on Curriculum](image)

There are indications that the instructors at KPG Sorong have difficulties in communicating with the students and in dealing with the theoretical content of the curriculum. Staff acknowledged that their Javanese and Manadonese accents might have been difficult for Papuan students to understand. Furthermore, the vast majority of the teaching staff had only Bachelor’s degrees and acknowledged they had trouble teaching some of the education and subject matter theory that was expected in the UNCEN curriculum: “It was too theoretical” they complained.

All three of the SWOT analyses conducted done by SIL, UNCEN and UNIPA corroborate the finding that the design and implementation of the KPG curriculum should accommodate the special needs of children living in communities in isolated areas and should be based on the local indigenous knowledge and culture. The existing curricula in the KPGs was sadly lacking in any reference to Papuan language or cultural traditions. Although the UNCEN study in particular saw good practice in the pedagogic and class management aspects in classrooms taught by KPG alumni, in contrast, in the case of the other two studies, it was noted that KPG trained teachers were not equipped to link the curriculum with local needs or culture in their lessons or make teaching materials using local resources. These studies conclude that these weaknesses in teacher competencies would impact greatly on the teaching effectiveness in the target schools.

All studies indicate that much needs to be done to help prospective teachers interact better with the local communities in which their schools are located. The UNCEN report in particular mentions that KPG alumni teachers feels that although they are generally appreciated by parents, there are problems in areas such as cooperating with parents to overcome learning and behavioural issues and the low level of community participation in learning and teaching activities in the school. Most of the KPG teacher alumni have a poor opinion of the parents and communities in the rural and remote areas in which they teach, reporting that parents often do not consider the education of their children important and do not encourage their children to learn at school or do homework. This reflects perhaps not only on the negative attitudes of many of the teachers going to teach in the remote indigenous communities, but also the low demand of parents for their children's education. This presents a major challenge for providing education in these underserved communities in Tanah Papua, and the teachers could be trained at the KPG to help address this challenge by interacting more effectively with the communities and parents. The sensitization of student teachers to the socio-economic, cultural and linguistic contexts of the indigenous communities living in these rural and isolated areas needs to be improved through the introduction of a more relevant curriculum.
4.5.1 Teaching Practice in the Curriculum

As observed by SIL, the first teaching practice (practicum) was short and lasted 2-4 weeks, while the second practicum lasted much longer and ranged from one semester to one year. For the long practicum, students were placed in villages in groups to teach in a local elementary school. While the purpose was to bring student teachers under the supervision and mentorship of an experienced teacher, this could not always be guaranteed (in Merauke the survey team were told of a group of students that had actually to teach the mentoring teacher how to teach).

Unfortunately, as observed by the SIL and UNIPA Studies, most of the student teachers at the KPG did not teach in the areas most desperately in need of teachers because the cost of traveling to these locations is much greater (particularly flights to the most rural and otherwise inaccessible areas).

4.6 The Language and Culture Curriculum

A review of the language curriculum of the KPG has been undertaken by SIL as part of the SWOT analysis of these institutions. The study addresses the following three questions concerning the original mission and vision of the KPG:

1. Are the KPG specifically targeted for rural and remote areas ("Khas Rural and Remote")?
2. Is the Vision of the KPG focused on Rural and Remote Schools?
3. Are the KPG Uniquely Papuan ("Khas Papua")?

Curriculum review is often viewed as nothing more than a textbook review, which unfortunately short-circuits the aim of teacher education being an intentional and systematic endeavor. While there are many models for curriculum review (Stenhouse 1975: 5), the purpose of a curriculum review is to promote the improvement of the existing curriculum (Johnson, 1999:223). This purpose is further focused in this study as it relates specifically to the language situation experienced by elementary school teachers in rural and remote schools in Papua. The question therefore that ultimately drives the curriculum review conducted as part of this strategic planning study is whether the curriculum being used to train teachers at each KPG is adequate for the language and cultural situations faced by teachers in interior and isolated schools.

Papua has a highly complex language situation with 275 languages (see Chapter 7). The challenge that this paper attempts to address is the challenge faced by many teachers graduating from Teachers Colleges of Papua and West Papua (KPG): whether the graduating teachers are prepared effectively to teach in the rural and remote settings where the language of communication may not be a commonly known language between the teacher and the student. This educational concern was anticipated in the Papua Governor’s special regulations on rural and remote education for Papua: “If Bahasa Indonesia cannot be used as the introductory language in delivering education, the local language can be used as the introductory language.” This Governor’s policy is based on two national laws namely (i) Special Autonomy Law No. 21/2001 Article 58 Point (3) which explicitly stated that “Local language can be used as the language of instruction in primary education as needed”; and (ii) the National Education System Law No. 20/2003 Article 33 Point (2): “local language can be used as a language of instruction at the early years of education if needed for transferring certain knowledge and/or skills.”

Therefore, to guide this process of reviewing the language curriculum used in each KPG in Tanah Papua, an evaluative framework was defined to evaluate if the curriculum presently employed in the KPG effectively prepared their graduates to accommodate rural and remote settings where the language of communication may not be the national language (Bahasa Indonesia) but an indigenous mother tongue. In order to accommodate this research question, a curriculum review protocol was used in the SIL study that borrowed heavily from the field of second language linguistics and pedagogy. The study provides significant information relating to the following:

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1. The ability of Papuan Kolese Pendidikan Guru to effectively address the shortage of appropriately trained Papuan teachers for rural and remote communities in Papua.

2. Significant information on how this challenge is interpreted by different schools and their staff.

3. A discussion of the implication of teacher training on any plans to include a mother tongue multilingual education component within the curriculum for rural and remote elementary schools and the preparation of its teachers.

The three studies conducted as a background to this chapter all observe that the current curriculum of the UPP PS D2 PGSD does not yet accommodate the local languages to be taught to KPG students. This issue is taken up in more detail in Chapter 6 on Mother-Tongue Based Multilingual Education, but at the very least, teachers should be trained to value the importance of using the mother-tongue especially in the early grades and to develop a sensitivity and respect for the richness of the multilingualism in Tanah Papua. An understanding of local languages is critical to improve interaction in the classroom and in the host community. Currently, the KPG graduate teachers reported that the language used for instruction in the classroom is a natural combination of Bahasa Indonesia, the local dialect such as Moi dialect (Sorong) and also even Javanese when the majority of the population is Javanese transmigrants. The UNIPA study observed that 19 interview respondents (76%) were in fact fluent in local dialects and that they all considered that possessing a good understanding and skills in local languages is important. Fluency is especially important as KPG alumni are expected to return to their home regions to teach (in the rural areas), where a part of the population or student population commonly use their local languages in daily conversation and for instructional purpose, especially in the early grades of the elementary school.

It is significant that one of the Javanese graduates of KPG Sorong stated that most students in this school do not understand much Bahasa Indonesia, since they communicate in the Javanese language as their mother tongue. This particular community lies in the Salawati and Mayamuk sub-districts, within Sorong regency, which are dominated by transmigrants originating from Java. The Javanese language is therefore used as the medium of instruction because it is more familiar and understood by the students and teachers. It would appear that this practice should also apply for children in the rural and remote communities and schools in Papua and West Papua who are not yet able to speak Bahasa Indonesia and therefore use their mother tongue, particularly in the earlier grades. Interestingly, this principle seems to apply to KPG alumni who teach in these isolated communities themselves, both Papuan and non-Papuans; they seem naturally to combine Bahasa Indonesia with the local language when teaching. Despite this natural multilingualism, the KPG curriculum has not established the use of first language in the land of Papua in order to prepare prospective teachers to use the mother-tongue in the early grades.

According to graduate respondents of the Mimika, Nabire and Merauke KPGs, Bahasa Indonesia is used in 73.4% of the teachers’ daily interaction in the schools to which they have been assigned, despite the fact that the schools are located in a remote area in Papua. A mix of language is used 25.7% of the time, and local languages are used 0.9% of the time. This is consistent with the percentage of teachers who speak each respective language and reflects approximately the ethnic mix among KPG graduates.

In answer to the questions posed earlier in this section (4.5), the following observations can serve in response to these critical questions:

4.6.1 The KPG Mission and Vision: Are the KPG Uniquely Papuan (“Khas Papua”) and specifically targeted for rural and remote areas (“Khas Rural and Remote”)?

The tension between the original aim of the KPG as articulated in the Governor’s Decrees on education for rural and remote schools becomes striking when one compares the Governor’s Decree with the aims listed by the KPG in Nabire and Merauke. For example, in the Nabire and Merauke mission statements, nowhere are traditional remote communities mentioned in the opening aims of the school. Nor are they mentioned in over 20 points listed under the Nabire vision, mission, motto and aims of the KPG. The KPG in Mimika was an exception. The atmosphere on campus, its emphasis on life skills and its focus on a “rural
and remote” approach to ensure their graduates could thrive in rural and remote villages saturated the institution. In the published documents, clear expressions could be found indicating their mission was to ensure their graduates would flourish as teachers in remote elementary schools. The school director was frank in acknowledging that the trade-off was spending less time on some of the theoretical issues that dominated the UNCEN curriculum in favor of ensuring her graduates would succeed as teachers in difficult environments (see Life Skills Curriculum below).

According to UNIPA’s study, KPG Sorong was also established in part to assist the remote, traditional community (KAT) by transferring life skills learned by graduates in areas of health, nutrition, farming, carpentry and electricity.64 However, although the mission statement of KPG Sorong does focus on the creation of a knowledgeable, moral and ethical generation, the vision does not accommodate the indigenous traditional communities as intended).

4.6.2 Is the Vision of the KPG’s Focused on Rural and Remote Schools?

All Papua KPG principals and faculty felt it was very important to model their program after the teacher training program at Cenderawasih University (UNCEN). This appears to be driven by four reasons:

i. UNCEN was the initial driving force in developing the structure for the curriculum of each of the Papua KPG.

ii. Each KPG wants to leave the future door open for their diploma students to continue their education to a Bachelor of Education degree (required to become accepted as a government employee -- something highly valued for its financial security) and thus want to ensure their courses will easily transfer.

iii. The Papua Governor’s regulations regarding the conversion of the KPG into two-year “community colleges/academies” currently fall under the purview of UNCEN.

iv. If KPG’s do not maintain their relationship with UNCEN (which costs them IDR 7,500,000 per student per year), they fear they will lose their legal right to graduate students with an accredited two-year diploma that can easily transfer to other institutions (see Ministerial Decree 107 of 2006 on the Establishment of Four UPP PS D-II PGSD UNCEN, Papua).

As a result, the official course of study, textbooks and teacher’s guides were created to ensure compatibility with UNCEN curriculum and UNCEN requirements.

It appears that what the government had initially intended to be a unique Papuan institution for the KPG, focused on addressing educational needs of neglected Papuan traditional communities, was replaced by a mission and vision that no longer focused on this most pressing of needs of preparing teachers for teaching in rural and remote communities.

The SIL Study concludes that what is needed is a return to the original aims that drove the formulation of the KPG: promoting quality education for remote and rural Papuan communities. This means developing a curriculum and modus operandi driven by the educational needs of rural and remote communities instead of adopting the UNCEN teacher-training curriculum meant for largely urban, technologically savvy, Bahasa Indonesia-speaking students.

Unfortunately, by adopting a more UNCEN mission and vision, there has consequently been a “domino effect” on decisions affecting choices in course selection and training methodology.

4.6.3 Are the KPG Uniquely Papuan (“Khas Papua”)?

KPG varied in size and in how they applied their mandate. One commonality was that all KPG enrolment statistics indicated they enrolled more non-Papuans than Papuans. In KPG Mimika, which has a student enrollment of 290, only 28% are Papuan; in KPG Nabire, with a total student population of 419 students,
40% (167) are Papuan. Similarly, KPG Merauke, with the largest enrollment, has 788 students of which 35% are Papuan.\textsuperscript{65}

When the interviewers in the SIL study probed the success of Papuan versus non-Papuan students, it quickly became apparent that graduation rates from the KPG favored the non-Papuan students.

\textbf{While none of the printed documents indicated a breakdown between graduation rates of Papuan and non-Papuan students, one faculty member confided that 70% of Papuans entering the KPG fail to graduate. KPG are generally a place where “Papuans are not favored to graduate”.

When the research team pressed for reasons behind the low graduation rate, reasons centering on several factors were mentioned: poor entrance abilities (many could barely read and write at a fourth grade level when entering the KPG) and “lack of discipline,” usually interpreted as an inability to commit to finishing school work on time. It was also pointed out that many of the Papuan students could find income without needing to finish school, and so there was less motivation to finish their course of study. When the research team probed about how Papuan and non-Papuans interacted during school, different answers were given. In Nabire, the students preferred to socialize with the students who shared their ethnicity. The only time they interacted was when forced to do so for a class or group activity. In contrast, in Merauke and Mimika it appeared that students freely interacted with one another.

\textbf{The standardized curriculum introduced by UNCEN with its almost culturally-neutral position, has unfortunately resulted in an extremely high drop-out rate of the very Papuan students the government hoped would return to their isolated communities to be a catalyst in the development of education.}

In addition to SIL’s and UNCEN’s findings regarding the three KPGs in Papua province, according to UNIPA’s study of KPG Sorong in West Papua, as of now there are 144 active, learning students in KPG Sorong coming from various regions in West Papua. Not all students enrolled in KPG Sorong and from these regencies have completed their studies. There are several dropouts.\textsuperscript{66} According to the teachers who have graduated, reasons for their dropping out include that: (i) Many students cannot adapt to dormitory living which promotes a different life style from that found in the rural areas, (ii) school conditions (infrastructure and facilities) tend to impede learning, (iii) insufficient funds (transfers from the regencies are late or not made at all) require students to seek their own accommodation in Sorong City and (iv) female students sometimes experience pre-marital pregnancies while studying at the institution. Since KPG are meant to take students from junior high school and enroll them in a three year SMA plus two year diploma program, or a five year secondary school/teacher’s college curriculum, it is surprising how few students who enroll the first year actually make it through the five year training period to emerge as teachers.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Institution} & \textbf{Average first year Secondary School Enrolment} & \textbf{Average Final 5th Year KPG Enrolment} & \textbf{Drop Out Rate over 5 years} \\
\hline
KPG Mimika* & 138** & 68** & 49% \\
KPG Merauke & 185 & 99 & 47% \\
\hline
\end{tabular}
\caption{2011-2012 Five Year Graduation Rates}
\end{table}

* Only 2012 Statistics were available to the research team.
** This represents enrolment data in the final high school year (year III instead of KPG year V) due to inadequate statistic.

\textsuperscript{65} Ibid. See Table 1. Comparative Enrolment Statistics

\textsuperscript{66} There is no exact number for the dropout rates per year and the total number of dropouts from KPG. However based on KPG information board, for example, in 2005/2006 there are 3 student dropouts (2 students from Sorong regency and one from Teluk Bintuni). In 2006/2007, there were 6 school dropouts (4 people from Sorong regency, and one person each from Fakfak regency and Sorong city).
### Table 3. Data of Graduates of KPG

<table>
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<th>Year 07/08</th>
<th>Year 08/09</th>
<th>Year 09/10</th>
<th>Year 10/11</th>
<th>Year 11/12</th>
<th>Total Number</th>
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<td><strong>Total</strong></td>
<td><strong>218</strong></td>
<td><strong>368</strong></td>
<td><strong>311</strong></td>
<td><strong>269</strong></td>
<td><strong>240</strong></td>
<td><strong>1406</strong></td>
</tr>
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#### 4.7 The KPG Instructional Staff

Comparative faculty statistics of Papuan vs. Non-Papuan faculty indicate that the KPG have a distinctly Non-Papuan faculty flavour, with an average of only 20% of the faculty being native Papuans. In addition to this numerical bias, the review also reported subtle biases against Papuans and Papuan culture during interviews with non-Papuan staff, particularly when exploring the high dropout rate of Papuan students from the institutions (70% in one of the KPG). A negative bias towards Papuans should at all costs be avoided in any public Papuan institution, but especially in an institution that is called “Khas Papua” or “Uniquely Papuan.”

Although the number of permanent and temporary teachers in KPG Mimika was considered sufficient, all 26 teachers were non-Papuan. KPG Nabire has fewer permanent teachers (11) than temporary teachers (20). More than 80% of these teachers are non-Papuan. KPG Merauke has 24 permanent teachers and seven contract based teachers, which is regarded as a sufficient staff size. Again, however, more than 80% of both the permanent and contract based teachers are non-Papuan. In KPG Sorong, out of 10 teachers, only four are Papuan (of which two are permanent and two temporary) with the remainder being non-Papuan. Papuan teachers come from Serui and Sorong (urban areas located on an island and a coastal area). The non-Papuan teachers come from central Java, Toraja and Ambon.

The formal primary objectives of the language curriculum were two-fold: for those students still enrolled in the secondary school portion of the KPG, it was passing the National Examination. For the students who were in the Two Year Diploma program, it was ensuring that students could teach elementary school students to read, write, speak and understand Indonesian without necessarily factoring in the unique Papuan linguistic situation mainly because there was concern in all the KPG about changing anything in the curriculum without the approval of UNCEN.

**Box 4. Challenges in focusing curriculum of KPG on Papuan culture**

*The concern in the KPG to focus the secondary curriculum on what was needed for students to pass the high-stakes National Examination (UN), as well as follow the existing UNCEN regulations concerning the diploma program in elementary school teacher training (UPP PS D2 PGSD), has had the adverse effect of forcing staff to omit much content and material that would be very beneficial to training teachers for Papua. Many instructors in the KPG wished they could focus more on Papuan culture, geography, and Papua folk tales and mythology but time and curriculum expectation militated against this desire.*

*Unfortunately, the selection of courses meant to address the linguistic and cultural complexity of Papuan isolated and rural schools was no different than the courses one would find in any generic teacher training college in Indonesia: the focus was on a generic type of monolingual Indonesian student and the supporting text books, teacher guides and classroom activities supported this approach. Student needs in isolated and rural communities were absent from the language curriculum.*


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67 IBID. See Table 2: Comparative Faculty Statistics
Within the UNCEN Bachelor of Education program there is in fact a course on Papuan Ethnography, which had remained in the Merauke KPG curriculum and played a key role in orienting students the uniqueness of Papuan culture. Unfortunately it was taken out of the Nabire and Mimika KPG curriculum. Faculty members from all KPG expressed time was taken in the secondary school culture curriculum to have Papuan students talk about their communities and make presentations about them. However, while most faculty realized much more time should be taken to prepare students culturally for the unique Papuan reality (especially since most of the students at the KPG were non-Papuan), they felt constrained by the curriculum to follow the “Java Centric” cultural expectations that the students would face in the National Exam.

Faculty expressed concern that some of the dorm students, who were the ethnic Papuans, no longer knew their own folk tales and legends because they were removed from their communities for school. In fact, there was a clear relationship between a KPG’s perceived need to accommodate Papuan indigenous languages and the degree of indigenous language vitality of their enrolled Papuan students.

Concerning the Life Skills curriculum, part of the KPG mandate is to ensure that students leaving the school can play a part in developing the “life skills” of the communities where they will work. Since their allocations are presumed to be ‘rural and remote,’ students are expected to graduate not only with elementary school teaching skills but also the ability to keep the school complex going as well as teach the community in the areas of health, nutrition, agriculture, carpentry and electricity. The interpretation and application of this mandate varied greatly between schools.

KPG Sorong does not offer classes for preparing teachers in life skills for education specifically for rural and remote areas. KPG Mimika has done some outstanding work in embracing this challenge. Students raised pigs on campus, had gardens, sold produce and built campus buildings. They had practical courses in maintaining solar panels, nutrition, and were expected to do basic electrical wiring. KPG Nabire provided some pictures of a garden but acknowledged that the “Life Skills Curriculum” was in need of resuscitation, and KPG Merauke acknowledged that still hoped to develop a more ‘hands-on’ life skills course. At present, KPG Merauke and Nabire have primarily introduced content on agriculture, electricity and health in the form of lectures rather than hands-on activities.

### 4.8 The Culture of Traditional and Remote Communities

There are no courses offered in the KPGs explicitly in Papuan ethnography, which is a crucial subject for enhancing the understanding of the students and their sensitivity of the unique cultures in Papua. Article 16 point 3 of the provincial government of West Papua’s draft Provincial Regulation on the implementation of local based education, although still in the academic stage and not released to the public, reveals that there is no clear definition of local curriculum. However, the draft regulation does mention that the regional government can develop local content curriculum for general, vocational and special education at the basic and secondary education level consisting of mandatory local content: Papuan language according to local culture, English, Mandarin and technology knowledge. Optional local content would include farming, plantation, industry tourism, carpentry and mechanics.

Point 21 in the General Provisions of the Papua Regional Law No. 2/2013 on Education Implementation clearly states the definition of local curriculum. Article 31 states that “local curriculum” for elementary education can contain at least 2 (two) subjects ranging from: local citizen knowledge, regional language, local history, local technology and life skills. Local curriculum for secondary education consists of foreign language other than English, Papuan indigenous culture, computer skills and entrepreneurship.

### 4.9 Tracking of KPG Alumni

The three studies by SIL, UNCEN and UNIPA conducted a tracking study based on a random sample of KPG alumni. The results of these studies are included in the full reports in Volume 2.
There would seem to be a total lack of monitoring of KPG graduates on the part of the institutions themselves and the district or provincial Education Offices, with no management information system in place to keep track of KPG alumni.

There is an apparent case of neglect on the part of the administration at the KPG and District Office to communicate details of KPG-graduating teachers in order to monitor their careers and ensure that the considerable investment in preparing them for teaching careers in rural and remote areas is realized to the benefit of the children in the rural and remote areas of the province. As well as ensuring that the administration tracks, recruits and posts graduating teachers, an evaluation mechanism should be in place to provide feedback to UNCEN and the KPG on how effective the teachers are in their schools. This information would provide valuable feedback for improving the curriculum and methodology of the KPG program to make it more relevant and effective.

The UNIPA study tracked 35 alumni of which 25 were teachers (7 male and 18 female) of an average age of 23 years. 13 of these were ethnic Papuans and 12 were non-Papuans. These teachers teach at elementary schools up to 3rd Grade (with one teacher teaching in kindergarten (PAUD). Most of the teachers found work in schools within or near the Sorong district and city and therefore did not return to their hometown. Based on the information from the Education Office of Sorong regency and the Director of KPG, each student, once they had graduated should have reported back to the Office, but none in fact had done so. This was the reason given for not having any information tracking KPG alumni, whether they were teaching and at which school, or whether they were not teaching. Data of students enrolled and graduated from KPG is not available at the Education Office of Sorong regency and the target regencies. The fact that alumni do not report to the office seems to be due to lack of incentive for them to report as they may be posted as teachers to areas against their will.

In addition, there were 10 respondents (6 men and 4 women) who had chosen not to take up teaching and took up a variety of jobs in Papua (one in Java). Respondents came from Papua (9 people) and Java (one person). According to the Director of KPG and also the Head of UPP PGSD at UNCEN, most KPG Sorong graduates had not become teachers because they were continuing their studies in several higher education institutions, such as UNCEN Jayapura, UPP PGSD UNCEN, STIKIP and also Uhamka in Sorong. Based on interviews and direct observation, the non-teacher respondents proved to be mostly either unemployed, work in private companies, or as motorcycle taxi men (ojek). Their reasons for not working as teachers were because they chose to follow more lucrative or more promising work opportunities and because teachers have an uncertain employment status with little or no chance of gaining civil servant status. It should be noted however that despite his passion to become a teacher, one respondent was appointed as the District Treasurer.

Most of the KPG Sorong graduates have not been recruited as regional honorarium based teachers or civil servants (Pegawai Negeri Sipil/PNS). The 71.4% of respondents who had become teachers had not yet been recruited as PNS, neither were they honorarium-based teachers paid by the region. The teachers received honorarium as salary from the school itself (school honorarium based teachers). In Sorong district, not one of the KPG graduates interviewed in the study was recruited as a PNS. In the Wondama Bay, there were four alumni from Sorong KPG who became civil servants. Although they were not recruited as government teachers, they had been recruited as staff in the education office, sub-district office, archive office and library. Not one KPG Sorong graduate was successfully encountered in Manokwari regency during the visit to the schools in the rural and remote areas in Manokwari. In general, the employment status of the KPG graduated teachers was as school honorarium based teachers and not regional honorarium based teachers.

Uncertain employment status and little chance of becoming PNS were some of the reasons KPG graduates gave for deciding not to become teachers and instead seeking other employment. According to the UNIPA report, there is a strong feeling among KPG alumni that the local government is not fulfilling its commitment to recruit KPG graduates as permanent teaching staff. Indeed, a circular letter by the Minister
of State Personnel (Menteri Pendayagunaan Aparatur Negara/MenPAN) on teacher recruitment stated that there is no allocation for D2 (PGSD) and KPG graduates, only for S1 graduates. Again, it would seem that the regulatory framework has worked against the original purpose of establishing the KPG to send specially trained teachers to serve in rural and remote areas.

It is also significant that the UNIPA study reports that a majority of the respondents interviewed (84%) continued their education after graduating from the KPG. These teachers expressed the desire to upgrade their competency and qualifications by acquiring an S1 degree by distance learning while teaching at school.

UNCEN found that in line with the purpose of the KPG, in Papua Province more KPG alumni had become teachers (93.3%) and had a more secure career path. Out of those who became teachers, 17% had become civil servants (with a further 19% applying as candidates for civil service teacher status). However, the majority (over 45%) remained as honorarium teachers and almost 18% were contract-based teachers. Non-teaching alumni in Papua Province were only found in Merauke City. The reasons given for this were that there was already a sufficient supply of teachers as well as limited demand. There was also one alumnus in Central Mamberamo regency who was not a teacher, but was recruited as staff at the Education Office.
4.10 Recommendations

The following are recommendations that emerge from the discussion of issues on the KPG throughout this chapter that are in turn based on the findings of the three studies conducted by SIL, UNCEN and UNIPA on these institutions. Further, more detailed recommendations can be found in the Research Reports themselves, which are presented in Volume 2. More detailed policy options can also be found in the various chapters in this document, particularly relating to the language issues (MTB-MLE), ICT Evaluation, and Promising Local Practice as well as more general Strategic Options in the last chapter.

1. Performance Problem

There are critical inconsistencies in the regulatory framework governing KPGs and there is an urgent need to solve the lack of alignment among laws, decrees and regulations at the national, provincial and district levels that result in undermining the very existence of the KPG and devaluing its alumni teachers. The issuing of two different decrees, i.e. Decree of the Minister of National Education of 2006 on the development of UPP PS D2 PGSD and Decree of the Head of Education, Youth and Sports in 2009 regarding the establishment of the one-roof school KPG, has caused uncertainty in the term and management of KPG between the Education Office and FKIP UNCEN. As a consequence, there is confusion concerning the management of KPG as to whom the institution is accountable. Should they report to the Education Office or to FKIP UNCEN?

POLICY OPTIONS

1.1 Resolving the Inconsistencies: A resolution should be found among the many inconsistencies in the regulatory framework relating particularly to the establishment of KPGs and the integration of the SMA curriculum with that of the UPP PS D2 PGSD. The “Revitalization of the FKIP” currently being conducted by UNCEN presents a major opportunity to resolve these inconsistencies that have profoundly affected the performance of the KPGs and have caused confusion about their role and management between UNCEN and the Provincial Office of Education and Culture, Papua.

2. Performance Problem

There is uncertainty concerning the handover status of KPG Sorong from the Papua Provincial Government to the West Papua Provincial Government post-the 1999 “Expansion” (Pemekaran). This has resulted in confusion about ownership, asset management and funding of the KPG. The situation has already resulted in institutional stagnation of KPG Sorong in terms of recruitment and performance and if this situation is allowed to continue, the college may face imminent closure. The threat of potential closure is due to the ambiguity of leadership and is exacerbated by competition from existing similar institutions for training teachers in the province such as STIKIP Muhammadiyah, UPP PS PGSD UNCEN and Uhamka in Sorong city.

POLICY OPTIONS

2.1 Clarifying Responsibilities: Responsibility for the management of the KPG Sorong must be made clear. The KPG could be managed by UNIPA (since UNIPA is located in West Papua and will have its own faculty of education (FKIP in the near futurei)69.

2.2. Enhancing Coordination and Cooperation: Coordination and cooperation must be improved between the Education Office of West Papua, Regency Education Office, the KPG Sorong in operating the KPG and UNCEN.

2.3 Settling Ownership Issues of KPG Sorong: Ensure/establish the certainty of ownership and asset handover of KPG Sorong from Papua province to West Papua province. This includes ensuring the settlements of the handover of educational assets from Papua province to West Papua province after the region expanded in 1999.

2.4 Acknowledging the Role and Importance of the KPG in the Perdasi: The West Papuan Perdasi is still in draft form and is currently open to inputs and suggestions. KPG Sorong is the only KPG in West Papua, and giving it sufficient attention and leadership entails mentioning it in the Perdasi. The Perdasi’s oversight in mentioning KPG does not reflect the situation as outlined by the Education Renstra of Papua province, which does give attention to KPG and seeks to support a new KPG in the highland terrain and support KPG graduate teachers to continue their

69 The Governor’s decree for establishing the FKIP UNIPA is, at the time of writing, currently being processed.
education to S1 Level. The initiative in RENSTRA is in line with FKIP UNCEN's policy plan, which intends to revitalize the curriculum and to upgrade the existing KPGs (see also Performance problem 8).

2.5 Establishing Clear Technical Guidelines: to clarify management and strengthen leadership, it is necessary to have clear technical guidelines that regulate the standard mechanism for KPG accountability, both towards the regional government that provides funding and is the biggest user and towards UNCEN as an education institution that provides the D2 diploma.

3. Performance Problem
The curriculum in use in the KPG is the curriculum formulated by UNCEN's FKIP. The vision and mission of the KPG have not yet accommodated the needs of rural, remote, and indigenous traditional communities, especially concerning the teaching of relevant life skills and mother tongue based multi-lingual education, especially in the early grades of elementary school – all of which would help to equip KPG alumni teachers to prepare for placement in rural and remote areas and prepare them to empower indigenous communities by using the skills they obtained while studying at KPG.

POLICY OPTIONS
3.1. Revitalizing the FKIP and Reforming the KPGs: There is a need to support UNCEN in its recent initiative of “FKIP Revitalization” that is intended to also include reforms to the UPP PS D2 PGSD programs in the KPG. The intention is to ensure that the teacher preparation programs are responsive to the needs and socio-economic condition of Papuan society, especially in the traditional communities in rural and remote areas and that graduates are equipped with knowledge and skills to teach in these unique contexts and are also so adequately prepared to empower the communities and contribute to their overall development.

3.2 Revitalizing FKIP and Developing Program for Education in Rural and Remote Areas: The Revitalization of the FKIP of UNCEN should include the development of a special program and curriculum on “Education in Rural and Remote Areas” that would be able to accommodate KPG graduates, thus providing them with better opportunities to gain an S1 qualification as well as helping them to be more prepared when assigned in rural and remote areas.

3.3 Teaching in Neighboring Schools: Develop “UNIPA Mengajar” or “UNCEN Mengajar” program, which especially places focus on schools around campus that need attention. For example, students are given the opportunity or task to teach in schools around the campus or in rural and remote areas for a certain subject, such as English, mathematics, science or local language. This can also be done for each KPG.

3.4 Reading Materials in Local Languages: Create reading materials in the local language (by the Faculty of Literature), e.g. folklores from the region, which would also serve to preserve local folklores.

3.5 Focusing on Appropriate and Relevant Curriculum and Methodologies: The curriculum of the KPGs should focus on language development in the early grades in the mother tongue/multilingual environment, multi-grade teaching methodology (to prepare teachers for the common reality of having students of many grades in one physical classroom), curriculum development and planning for early grade (particularly for an integrated education program for remote indigenous communities and integration between PAUD and SD, including the use of mother tongue) using skilled labor or experts in craft, guild, fisheries and agriculture to educate and train KPG students, such as carpenters, fishermen or farmers.

4. Performance Problem
There is a high rate of dropout of ethnic Papuans from the KPG and also a low proportion of instructors and administrator who are ethnically Papuan. The curriculum is devoid of instruction on Papuan culture and languages.

POLICY OPTIONS
4.1 Increasing proportion of Ethnic Papuan Staff: There is a dire need to hire more ethnic Papuan staff, particularly those who can teach language and culture components of the curriculum and fulfill the need to teach local production and adaptation of teaching resources.

See under Promising Local Practice: Multigrade Teaching and Learning, in Chapter 12 of this document.
4.2 Changing to “Khusus Papua”: Because of the high dropout of ethnic Papuan students - and yet the critical importance of these students emerging as teachers for the rural and remote areas which are predominately ethnic Papuan -- it is imperative to change the whole climate of the KPG to reflect its mandate as “Khusus Papua”. This means recruiting more instructors and administrators who are Papuan as well as transforming the curriculum and pedagogy to reflect the needs of these students and the institutional objective to serve the specific targeted areas. This also means encouraging non-Papuan faculty to learn the language and culture necessary for the fulfillment of their roles. The introduction of courses on MTB-MLE and Papuan culture and customs and the use of the dormitory accommodation to develop a Papuan flavor for music, food, and celebration of festivals would serve the purpose of sensitizing the students to the communities in which they will eventually be teaching.

4.3 Preparing a Teacher Guide on Papuan Culture: As mentioned in the UNCEN study, Frederikus H. Letsoin (Chairman of the Indonesian Teachers’ Association, Mimika) has suggested that UNCEN and the Education Office cooperate to make a “Teacher Guide on Papuan Culture”. This Teacher Guide will be the reference for teachers in teaching Papuan Culture as local content and will provide guidance on adapting the activities to the needs of different cultural contexts. KPG students can use such a guide to create a “classroom in a box” or project while on their teaching practice.

4.4 Giving KPG Graduates Skills in Making Teaching Materials Using Local Resources. This should be linked to the KPG Life Skills program in order to ensure teachers make use of locally available materials as well as the skills of the local community to make lesson content relevant, practical and interesting for their students.

4.5 Conducting Comparative Study and Sharing among KPGs: There should be a comparison study between KPG Sorong (West Papua) and other KPG in Papua, which are successful in having introduced teacher programs that are “uniquely Papuan”. Sharing of ideas (“cross-fertilization”) should also take place among the KPGs to discuss “best practice” in the curriculum, which will prepare graduating teachers to teach in the targeted areas.

5. Performance Problem

Monitoring, data collection and other forms of tracking have not been conducted either by the Education Office or by the KPG on the KPG graduates, including their location and schools in which they are posted as teachers. There is also no evaluation of the performance of KPG alumni teachers in the schools to which they are eventually posted, resulting in no feedback to UNCEN or the KPG on the quality, effectiveness and relevance of the programs for preparing teachers: critical information needed to improve any teaching or training program.

POLICY OPTIONS

5.1. Tracking and Monitoring in MIS and M&E of KPG Students and Alumni: This tracer study is the first conducted on KPG graduates. A rigorous follow-up study needs to be conducted, creating a MIS on KPG graduates, covering their attendance in school, the selection process of students entering the KPG, assessment of KPG graduates’ capacity and the recruitment and distribution of graduates to schools that need teachers, especially in rural and remote areas. The design and implementation of such an integrated Management Information System (MIS) will also need to include a monitoring and evaluation (M&E) system for tracking teachers and their performance. Evaluating the quality and effectiveness of teachers in the schools in the rural and remote areas will provide valuable feedback to UNCEN and the KPGs about the effectiveness and relevance of their training programs in order to make the necessary improvements.

5.2 Recruiting Pengawas for the KPG: A special school supervisor is needed for KPG because the current supervisor is qualified specifically for secondary education (SMK/SMA) and therefore not appropriate for the D2 teacher training program. This special KPG supervisor will supervise existing KPGs in their learning and teaching process, curriculum and also facilities and infrastructure based on the previously established minimum service standard for KPG.

5.3 Conducting Quality Assurance of the KPG: Improving the academic quality of KPG by ensuring that regular routine reports are made to UNCEN, which would also help D2 graduates of KPG to be registered in an institution of Higher Education.
6. **Performance Problem**

Although the SMP graduates are highly motivated to enter the KPG, their academic skills are often severely limited and this lowers the standards throughout the KPG program.

**POLICY OPTIONS**

6.1. Improving Literacy, Numeracy and the KPG Selection Process: SIL's finding on the reading ability of many SMP students being equivalent to the ability of students of Elementary level Grade 4 needs special attention as the low level of literacy and numeracy should not be imported into the KPG. It is therefore necessary to have an early grade reading assessment in the elementary school and remedial interventions to strengthen the literacy of students at elementary and junior secondary levels. Also important here is the need to establish an effective and fair selection policy for students entering the KPG (including possible literacy and numeracy tests as well as an interview to evaluate the candidate's suitability and commitment to becoming a teacher in the rural and remote areas).

6.2. Selecting the Intake from SMA/SMK graduates.

7. **Performance Problem**

Few KPG alumni teachers are promoted to become civil servants because they do not have an S1 qualification. This acts as a major disincentive for these teachers who are at risk of dropping out because of job insecurity. KPG graduates are not accommodated in the recruitment regulations for civil servants (government teachers)\(^{71}\).

**POLICY OPTIONS**

7.1. Upgrading the Status of Honorarium Based Teachers: The status of honorarium based teachers, who have served more than three years in schools in rural and remote areas with good performance, should be upgraded by recruiting them as civil servants (PNS).

7.2. Upgrading the D2 qualification to S1 for KPG alumni should be mandatory.

8. **Performance Problem**

The SM3T program\(^{72}\) (Pre-Service Teaching in Rural Areas for Bachelor of Education Students) and the existence of STIKIP (Colleges of Teacher training and Education) in several districts in Tanah Papua pose a challenge for KPG to provide the best service and a challenge for KPG graduates due to their having to compete with graduates of those programs. The initial investment in training local teachers with the relevant competencies, sensitivity and understanding of the local context is often devalued when there is lack of coordination, monitoring and management of the teacher supply.

**POLICY OPTIONS**

8.1. Creating Coordination between UNCEN, KPGs, Provincial and District Education and Culture Offices and the Directorate of Higher Education, which is responsible for the SM3T programs: Coordination will help ensure that programs deploy teachers to schools according to demand and that such programs do not conflict with the mandate of the KPG in posting its own graduating teachers to these targeted areas.

8.2. Promoting Cooperation between the Ministry of Education and Culture, UP4B (Unit for the Acceleration of Development in Papua and West Papua) and the SM3T program: Cooperation will help to ensure that such a national program does not have the unintended consequence of undermining the recruitment of local KPG graduates who should be prioritized to teach and educate in rural and remote areas.

9. **Performance Problem**

*The draft Perdasi, which is under compilation by the Education Office of West Papua province, has included no reference or regulations concerning the KPG. Meanwhile, the management of the KPG has*

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\(^{71}\) This issue was argued and then raised in one of the local Papuan newspapers, Cenderawasih Pos on 3 October 2013.

\(^{72}\) SM3T is a pre-service teaching program under the auspices of the Directorate of Higher Education (DIKTI) for those embarking on a Bachelor of Education program at university to participate in the accelerating education development in rural areas of Indonesia. Teachers spend a year teaching and doing community service in 3T areas: “left behind areas, frontier areas, and rural isolated areas”. This stage is the initiating stage to prepare professional educators who will enter the Teacher Profession Program (PPG) for the next following year.
been transferred to the West Papua province Education Office. Little attention, support or monitoring is given to KPG graduates by the provincial and district Education Offices and by the KPG itself. The district offices in West Papua, which have sent their students to study in KPG, have not provided funds to KPG, stating that the KPG has already received BOS and BOSDA funds for this purpose. This has resulted in severe underfunding at the KPG and a drastic fall in enrollments.

POLICY OPTIONS

9.1 Conducting Consultations and Strategic Alignment: Consultations and strategic alignment to take place between West Papua Province and Papua province. Under Perdasus 2 of 2013, the KPG has been recognized and regulated as one of the teacher education institutes that are unique to Papua. The “indecisiveness” of the regional and central governments to accommodate KPG graduates has become one of the issues that need to be addressed. The very existence of KPG in Papua is the result of the attempt of national and provincial policies to meet the demands for teachers in Papua.

9.2 Promoting Budget Transparency in KPG on funding and use of KPG funds: informing the community of the funding and use of funds, e.g. by posting information on the use of BOS and BOSDA funds on the bulletin board to be viewed by the public, will promote the responsibility of the district offices in West Papua in providing funds. The business sector in West Papua must also be more actively involved in paying attention to education in Papua province, especially in paying attention to KPG as a provider of teachers who understand and are able to adapt to the remote traditional community in RRA. For example, they could provide scholarships, funding assistance or internship opportunities (practice).

9.3 Giving More Attention and Funding to KPG in West Papua: West Papua Provincial Education Office must pay more attention and be more committed towards KPG, as demonstrated by the Sorong District Education Office and the Sorong Regent who have provided aid and support because of the importance of KPG as a supplier of skilled teachers to the rural and remote areas of the province.

9.4 Recruiting more KPG Alumni Teachers: Recruit KPG graduates as regional honorarium-based teachers to be placed in schools that require teachers, especially in rural and remote areas. KPG graduates should also be able to fill the gap in teacher supply in schools in rural and remote areas. They can be especially useful in serving as substitute teachers for schools when teachers attend training in the city or pursue higher education.

10. Performance Problem

Teaching practice is not often held in schools in the rural and remote areas because of funding constraints in sending students from the KPG to schools in these areas and in supervising them. Providing the necessary close supervision is also a problem, not only because of the cost but also because few instructors at the KPG have relevant experience or competency to support and mentor students in the field.

POLICY OPTIONS

10.1 Promoting More Funding and Better Supervision for Teaching Practice: An increase in the budget has to be provided for appropriate teacher practice placement and supervision. By conducting closely supervised teaching practice in schools, the students of KPG are able to practice the teaching skills acquired at KPG. This practicum also acts as their initial step to understanding the community’s condition, including its cultural and linguistic context, at first hand, enabling them to better prepare for their eventual placement in schools in such rural and remote areas.

10.2 Exploring Innovations: Study other structures of teaching practice as well as methods of funding (e.g. the innovative IN-OUT-IN systems of the Sampoerna Institute of Education).

11. Performance Problem

The studies reported poor infrastructure and facilities in some of the KPGs. There is often not enough land available to practice planting, farming, fishery, etc. Libraries are often non-existent or dilapidated and unused. Science laboratories, microteaching facilities and workshops for training in carpentry, electricity, etc. (all important for teachers to support community development) are inadequate or not staffed with technicians.
POLICY OPTIONS

11.1 Inspecting and Upgrading Facilities: Once the regulatory framework is clarified, there should be a rigorous inspection of all facilities to establish an “Adequate Operational Standards” for each KPG. Wherever required, infrastructure and facilities should be upgraded.

11.2 Assessing KPG financial needs: More information is needed regarding investment, operation and management and personnel costs.

12. Performance Problem

*There are insufficient incentives provided to teachers from the KPGs to work in the rural and remote areas and also to encourage the KPG alumni to continue their studies in order to complete an S1 level qualification that will qualify them as PNS teachers and better career paths.*

POLICY OPTIONS

12.1 Encouraging Teacher Upgrading: It is significant that the UNIPA study reports that a majority of the respondents interviewed (84%) continued their education after graduating from the KPG. Teachers emerging from the D2 program of the KPG have a strong desire to upgrade their competency and qualifications by acquiring an S1 degree by distance learning while teaching at school. This should be encouraged by UNCEN.

12.2 Incentivizing Teacher Quality: Ways of raising the status of the KPG graduates should be found by attracting more able students — as well as more ethnic Papuans as students and as instructors — by the use of incentives such as enhancing career prospects for teachers deployed to work in rural and remote areas through accelerated promotion, funding and preference being given by UNCEN for upgrading to S1 qualifications, recognition of prior learning (RPL) being given for service in rural and remote schools, evidence in portfolios of innovative teaching of literacy, numeracy, adaptation of local curriculum, exceptional community service, etc.

12.3 Providing Allowances for Difficult Postings: The Education Office has not provided incentives for teachers graduated from KPG working in the outermost, foremost and lagging areas. The incentive could be in the form of funds for food, transport, health, etc.

12.4 Facilitating Promotion to PNS: KPG graduates teaching in rural and remote areas can be recruited as civil servants (PNS) or provided with career incentives through clear performance-related opportunities for promotion and to continue their studies. The latter can be obtained by applying a time period (for example, after teaching for two years in these difficult areas). KPG alumni teachers can be recruited as permanent staff or supported in furthering their education to S1 Level (there is evidence that most KPG graduates continue their education to higher education, in order to upgrade from D2 to S1 degree level).

12.5 Enhancing Funding and Coordination: Funding for this policy can be provided by the local district government in which they are posted as teachers. Such a policy would be firmly based on the need for skilled teachers who are prepared to work in these underserved, rural and remote areas in Tanah Papua. Cooperation, coordination and good communication are important between these districts in need of competent and effective teachers and the KPG that would supply them.
Chapter 5
A Snapshot of Papuan Language and Education Policy

5.1 Introduction

Fifty years ago many of the areas discussed in this paper were largely bereft of schools, hospitals, airstrips and devoid of government control. Much has changed since then. Primary schools dot some of the most inaccessible regions of Papua and advances in primary, junior high and secondary education has progressed from almost nothing to the thousands of schools operating in the interior areas. Yet, in this globalized world of incessant competition there is seldom time to look back and celebrate one’s achievements. Every parent, governor and minister of education looks over their shoulder to see if those for whom they are responsible can keep up with the global competition around them. The pace of advancements in the world doesn’t reward those with a poor education.

Educational planning for rural and remote communities in Papua and Papua Barat is important and complex. This complexity is increased when the government has to factor in 275 languages, some which are vibrant but many of which are in flux and vulnerable to extinction. Besides attempting to discern the level of language vitality, decisions related to developing languages that may have no more than a few hundred speakers also need to be factored into multilingual educational decisions.

Policy decision on language use in Papua touch on several inter-related domains: long-term political unity of the nation, the socio-cultural identity of 275 Papuan tribes, and educational expediency in promoting access and quality of education among the most isolated tribes in Indonesia. Behind the quest to develop its indigenous languages lurk many unspoken questions concerning whether it would be financially feasible and even administratively possible. If we don’t develop these languages are we denying people their basic human rights to learn in their own mother tongue? Is it more economically prudent in the long term to lower the drop-out rate by initiating multilingual education programs or by encouraging Indonesian language use?

The Papuan government has embraced the task to promote quality education especially in areas that are considered rural and remote but the obstacle are as we have seen (see 2.4 Situation Analysis) enormous:

- The enrolment rate gap for junior secondary schools between Jakarta and Papua are staggering, from 93.3% in DKI Jakarta to 62.5%.74
- The Papuan highlands have a teacher absenteeism rate of almost 50%.75
- In the Papuan highlands, 7 out of 10 principals are not in school.76
- There are 275 languages in Papua in various stages of vitality, some of which are on the verge of extinction while others are the only language used by the community.77

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73 This chapter is based on the Report prepared by Dr. Joost Pikkert and his team in SIL, “Educational Planning for Isolated Papuan Language Communities” which was commissioned by ACDP especially for this Strategic Plan.
74 ACDP, Education Country Background Report, 2013:47
75 ACDP, Teacher Absenteeism, 2012:10
76 UNICEF/SMERU, Teacher Absenteeism, 2012:14
77 SIL, 2013
• Topography ranges from vast swamplands inhabited by hunter-gatherer tribes to isolated mountainous villages, hundreds of kilometers from the nearest government post.
• 46% of respondents in a recent BP sponsored study in the Teluk Bintuni Bay Area could not read a simple list of words in Indonesian; none were deemed to be functionally literate by UNESCO standards. 78

The purpose of this chapter is to ask what the role of mother tongue language education should be in improving educational access and quality for children between the ages of 6 and 15 years of age living in rural and remote areas of the Indonesian island of Papua. Language data in this report are meant to buttress the strategic planning process of regencies, sub-districts and communities, as they struggle with the decision of which language to use to introduce basic and functional literacy. At the outset, it should be noted that there are no recorded nations in the world that have effectively sustained multilingual educational programs targeting more than 200 languages simultaneously. The sobering reality is that Papua and West Papua boast a combined total of 275 languages. Do we need to develop all these languages?

In an attempt to address the linguistic and geographical reality of the province of Papua, the governor has enacted a series of policies meant to be a catalyst in driving the quality of education forward in the rural and remote areas. Some of these policies bear on the choice of language most suitable for education in remote and rural communities, requiring greater cooperation between differing levels of society; from the governor in Jayapura to the Edopi hunter-gatherer looking for wild pigs along the Membramo River.

5.2 Summary of Papuan Education and Language Policies Bearing on Remote Educational Practice

5.2.1 Provincial Responsibilities in Rural and Remote Education (Article 1-2)

Provincial Government responsibilities can be summarized as follows:
• authorized to organize, guide and supervise the delivery of formal, non-formal education system as well as that of the Teachers Colleges
• set the service standards and facilitate delivery systems, including technology, for the above domains
• encourage partnerships with community, business and universities to enhance quality.

5.2.2 District Responsibilities (Article 3-4)

The District government on the other hand is responsible for carrying out, supervising and delivery of the educational outputs in the formal and informal educational sector and can propose candidates for the Teachers Colleges or Community Academy. This means the District is responsible for:
• placement of teachers, non-formal educators and supervisors for schools;
• operational budgets that cover facilities, infrastructure, food staples (sugar, salt, soap, toothpaste, vegetable oil, cooking oil and others not available in the area), teachers, extensions workers;
• ensuring access and quality educational outputs.

District Government is authorized to:
• Carry out and supervise the delivery of formal and non-formal education for KAT; and
• Propose candidates to learn at KPG or Community Academy.
• Control the funding for carrying out the above mandate (Article 54).
5.2.3 Papuan Mother Tongue Based Multilingual Education (MTB-MLE) Policies

- Literacy education is based on the community (article 6.b.3)
- Introductory language in the delivery of basic education for KAT shall use Bahasa Indonesia. (Article 21:1)
- If Bahasa Indonesia cannot be used as the introductory language in delivering education, the local language can be used as the introductory language. (Article 21:2).

5.2.4 Policies for Ensuring Teachers Know the Language of the Community

- Students should come from rural and remote villages. (Article 33:a)
- Teachers’ College graduates as referred to in line (1), who have taught for 2 years in Small SD and receive good assessment from the Regency Government are entitled to attend S1 teacher education with the cost born by the Provincial and Regency Governments. (Article 35:4)

5.2.5 Policies Relating to the Community’s Role in Education

General cultural perceptions persist in many rural and remote areas that decisions affecting their local school largely exclude them and leave them powerless. This is generally an erroneous perception. The government in no way wants to keep communities disempowered and has enacted a series of policies meant to encourage community members and groups to play an active role in the betterment of their community school:

- The role of the community in the quality control of educational services includes participation in the planning, monitoring and evaluation of program unit of Basic Education program for rural and remote schools, skills courses, education, prevention and control of HIV-AIDS and other sexually transmitted diseases that is based on the village community as well as village community based literacy education. (Article 51:3)
- The role of professional organizations may include the provision of experts and resource persons in the field of Basic Education in the delivery of Basic Education for rural and remote schools, skills courses, education on preventing and controlling HIV-AIDS and other sexually transmitted diseases as well as village community based literacy education. (Article 51:4).

Any attempt to streamline multilingual education on the island of Papua needs to factor in role of both the Yayasan, or education NGOs (see 3.3 Education Foundations (Yayasan)) and the fast track Teacher Training Colleges - Kolese Pendidikan Guru or KPG (see Chapter 4).
Chapter 6
Mother-tongue Based Multilingual Education: A Global Perspective

6.1 Introduction

Pilihan bahasa di Indonesia adalah isu tanpa akhir pro-kontra. While Indonesian is taught in all schools, and English is part of the standard curriculum, the role of indigenous mother tongues in education varies from island to island. In Java and Bali time is set aside to ensure mother tongue literacy is part of the curriculum. These tribes also have a vibrant identity and high literacy rates as compared to Papua. This is not surprising if one understands the role vernacular literacy can play in educational success.

UNESCO has identified that children's overall educational attainment is enhanced if children are taught in their mother tongue in the early grades while teaching in the dominant language leads to serious educational concerns (e.g. high drop-out rate, low educational achievement and lack of classroom interaction -- UNESCO, 2003). It is these “serious educational concerns” that plague Papua, begging the question as to why the government does not take a serious look at implementing mother tongue based multilingual education.

Any consideration to implement a program in MTB-MLE would be wise to pay attention to the experiences of other nations that have attempted this endeavor. While it is fairly straightforward to implement an educational language policy in a country like Japan or Korea, that only need to deal with one lingua franca, the sheer number of languages in Papua brings untold challenges into the equation. Many questions lurk in the background? Is it better to concentrate on national and international languages that will open the doors to global access of information? Or is it more beneficial to give a balanced opportunity to students so that both dominant language communities as well as diverse linguistic communities can enjoy equity and quality in education?

With these thoughts in mind, this chapter will provide examples of the strength of different models as well as the mixed performance of five case studies which implemented a multilingual language approach in a diverse linguistic setting; Papua New Guinea, Nepal, Ethiopia, India and the Philippines.

In order to support the Papuan government in making the decision as to whether mother tongue based multilingual education (MTB-MLE) should be an option, this report will include the following key points as it relates to concerns that apply specifically applies to the province of Papua:

• Best and poor practices from other countries in implementing MTB-MLE
• The language situation in Papua as of May 2013
• How the government can move forward in implementing MTB-MLE

79 See, for example, “Unlocking Indonesia’s Language Policy” by A. Chaedar Alwasilah. Professor of Language Education, Indonesian University of Education (UPI), Bandung; published in Jakarta Post, Saturday, June 15, 2013.
6.2 What is MTB-MLE?

Mother tongue based multilingual education is an educational approach that launches education in the mother tongue of the children and transitions to the second language over a number of years (3-8 years depending on the MTB-MLE model). Depending on the model, subjects other than reading or writing may be taught, including indigenous knowledge and history, local wisdom literature, mythology, geography, and culture. Textbooks are prepared with the indigenous population in mind.

6.3 Why MTB-MLE?

Many nations have adopted MTB-MLE approaches to education for numerous reasons including the following:

- Taxes, international aid and school fees are wasted when children are taught in a language they don’t understand.\(^80\)
- Promoting the mother tongue in school not only helps the mother tongue, but also positively correlated with how well they will use the national language and English.\(^81\)
- Academic achievement of minority children in remote and rural settings.\(^82\)
- Increasing child participation in the classroom.\(^83\)
- Increasing school attendance (Smits et al, 2008)
- Lowering repetition of grades\(^84\)
- Ensuring the relevance of education is understood by illiterate parents\(^85\)
- Preserving one’s cultural identity
- Ensuring indigenous communities can participate in the decision making processes of schools
- Ensuring children just don’t copy text and recite language instead of understanding it.\(^86\)

6.4 Implementing MTB-MLE

Indonesia has a long history of multilingual education in Java, Bali and other islands. Through formal and non-formal programs, these languages and cultures have stayed vibrant and books continue to be printed in these languages. People are often proud to identify themselves as Balinese or Javanese.

Approaches to MTB-MLE for schools fall into three main categories:

1. Early Exit Transitional Model: Children are taught in the mother tongue for the first three years with the national language as a subject. In grade 4 all mother tongue education ceases. This model has proven to be less than effective in producing top academic results (Marmirez et al 1991; Saikia and Mohanty 2004; Thomas and Collier 2002).
2. Late Exit Transitional Model: Children are taught in the mother tongue for the first 8-9 years of education. Saami children in Norway and Finland have done well in this model. (Kutnab-Kangas, 2009)
3. No transition model: Children are taught in their mother tongue with other languages being taught

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80 Save the Children, 2009:8
81 Cummins, 2001
82 Mahanty et al, 2009
83 Malone, 2007
84 World Bank Report, 2004
85 MacKenzie, 2010:2
86 ASER Pakistan, 2010
as second languages alongside their mother tongue education. Has produced good results in Canada, Finland and Sweden (Kutnabb-Kangas and Mohanty, 2009).

6.5 Papua New Guinea: Lessons from the Sibling Next Door

While there may be 275 languages on the Indonesian island of Papua, these pale in comparison to their easterly neighbour that can boast an excess of 800 languages. Some comparative statistics help to clarify the modest challenges Papua, Indonesia compared with Papua New Guinea (PNG):

<table>
<thead>
<tr>
<th></th>
<th>Papua New Guinea (PNG)</th>
<th>Papua &amp; West Papua</th>
</tr>
</thead>
<tbody>
<tr>
<td>Languages</td>
<td>Over 800</td>
<td>275</td>
</tr>
<tr>
<td>Alphabets Made</td>
<td>380</td>
<td>72k</td>
</tr>
<tr>
<td>Literacy Materials</td>
<td>380</td>
<td>66</td>
</tr>
<tr>
<td>Clear Multilingual Education Policy</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Active Vernacular Literacy Programs</td>
<td>170</td>
<td>Less than 10</td>
</tr>
<tr>
<td>Number of Provinces</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

Box 5. The “Shell Book” for Producing Books on Village Life in the Mother Tongue (Papua New Guinea)

In Papua New Guinea, language workers and community people have worked together to produce materials based on village life. They have used the shell book method to produce the so-called Big Book, which the teacher uses with the whole group, and smaller pupil-sizebooks. Devised by SIL International and local people, the shell book method is an ingenious way of producing inexpensive textbooks suitable for many languages.

A shell book is a template of a book with pictures and no text (there is an accompanying book with the same pictures and the story in English). With copies of that template, the provincial educators working with SIL or other non-governmental organizations (NGOs) write a simple story in their language. The province then reproduces the stories for school use. In the past, with the help of SIL technical assistance team, villagers reproduced the new text using a simple silk-screen device. Now these materials can be produced using desk-top publishing technology and inexpensive reproduction techniques.

When one looks at the above data, it becomes apparent that the challenges in MTB-MLE are much greater in Papua New Guinea than on the island of Papua, Indonesia. It also becomes apparent that the efforts to accommodate the education to the languages of the indigenous peoples of PNG are very much in advance of the effort that has been expended in Papua Indonesia.

PNG’s MTB-MLE efforts have been put under the evaluated by the World Bank and the results are as follows:
1. All the children learn to read effectively;
2. Children were more proactive in schools (entered into activities better than in non-MTB-MLE);
3. Students asked more questions;
4. Students were more at ease in school as compared to the students educated in “English-only schools”;
5. Students knew what the teacher wanted instead of guessing.

However, there were policy concerns in the PNG program (that need to be carefully considered by Indonesia). These included the following:
1. Who is responsible? The Community? Non-formal Education? Preschool Education? Formal Education?

87 Dutcher 2004: 97
88 Dutcher 2004: 97ff
2. Who is responsible for the development of materials?
3. If communities develop their own materials, who pays?
4. If local teachers are used, do they need to speak English?
5. If the programs begin in preschool, how much MTB-MLE curriculum needs to be made for the first two grades?

These policy concerns should be factored into any MTB-MLE program in Tanah Papua, Indonesia.

### 6.6 Multilingual Educational Program in Orissa, India

There are approximately 60 indigenous communities in the Indian State of Orissa, each with their own language and culture. After observing low literacy rates and high dropout rates among tribal communities, the state government decided to begin consultations with local leaders to implement mother tongue instruction in 10 local languages. The program was implemented up to Grade 3 and the focus of the curriculum was to develop Cognitive Academic Language Proficiency (CALP) and Basic Interpersonal Communication Skill (BICS).

The success of this model was achieved from the outset with the collaboration of the local community leaders, workshops, creation of curriculum and reading resources, all in the local cultures and context. Local teachers were selected and trained to use contextual materials and curriculum. Participation of parents, a variety and quantity of materials in the local language, and the partnership with several active NGOs provided a comprehensive program with the ability to thrive. There were setbacks as well that are of common concern in any mother tongue program, the largest being the lack of adequate reading materials in the local language and the need for better training for local teachers in providing instruction across multi-grade classrooms and with mother tongue resources.

<table>
<thead>
<tr>
<th>Table 5. Orissa Multilingual Education Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Languages</strong></td>
</tr>
<tr>
<td>Saora (30 schools), Munda (20 schools), Santal (20 schools), Koya (20 schools), Bonda (5 schools), Juang (10 schools), Oroam (20 schools), Kishan (20 schools), Kui (20 schools) and Kuvi (20 schools)</td>
</tr>
<tr>
<td><strong>Districts</strong></td>
</tr>
<tr>
<td>Gajapati, Kondhmal, Keonjhar, Malkangiri, Mayurbhanj, Rayagada, Sambalpur, Sundergarh</td>
</tr>
<tr>
<td><strong>Number of schools</strong></td>
</tr>
<tr>
<td>185 (pilot schools) and 450 (current schools)</td>
</tr>
<tr>
<td><strong>Curriculum designing process</strong></td>
</tr>
<tr>
<td>Series of workshops, curriculum involves local content and context with the involvement of community members and tribal teachers</td>
</tr>
<tr>
<td><strong>Textbooks</strong></td>
</tr>
<tr>
<td>Tribal languages, Mathematics (pictures and examples from the everyday context), and Environmental Studies in mother tongue</td>
</tr>
<tr>
<td><strong>Supplementary materials</strong></td>
</tr>
<tr>
<td>Alphabet books, story books, dictionaries in 8 tribal languages, glossaries, teacher handbooks, MLE manuals, training modules, worksheets, flash cards, educational games, word banks etc.</td>
</tr>
</tbody>
</table>

Source: Orrisa Multilingual Education Model, Prem Phyak, ADB, 2012

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90 Mishra and Singh, 2008
6.7 Ethiopia Multilingual Education

The Ethnologue reports 84 ethnic groups and cultures in Ethiopia. While Amharic is the official language, the government realized the need for a provision of multilingual education and implemented The Education and Training Policy (Ministry of Education, 1994) to provide mother tongue education up to Grade 8. With this incentive, four different models of this mother tongue education are found at present.

a) Regions with 8 years of MLE policy: Oromiya, Tigray, and Somali
b) Regions with 6 years of MLE policy: Addis Ababa and Dire Dawa
c) Regions with 4 years of MLE policy: SNNPR and Bambella
d) Regions with no MLE, but 6 years of Amharic L2 medium: Afar and Benishagul Gumuz

Heugh, Benson, Yohannes and Bogale report in the following table that students who learned through the regional majority languages for eight years had significantly higher mean achievement scores in 2004 in Mathematics, Biology, Chemistry and Physics than students who went through English-medium schooling. The same results were shown in 2008 in Maths, Biology, Chemistry and Physics and most interestingly, there was minimal difference in the English proficiency of mother tongue compared with English students.

Table 6. Grade 8 National Assessment Results for 2004 by Medium of Instruction, Ethiopia

<table>
<thead>
<tr>
<th>REGION/MOI &amp; NO. STUDENTS TESTED</th>
<th>Data analysis</th>
<th>English</th>
<th>Mathematics</th>
<th>Biology</th>
<th>Chemistry</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray/Tigrinya 474,477,472,473</td>
<td>Mean</td>
<td>39.06</td>
<td>44.40</td>
<td>49.08</td>
<td>42.98</td>
<td>39.48</td>
</tr>
<tr>
<td></td>
<td>Std dev</td>
<td>15.58</td>
<td>16.54</td>
<td>11.68</td>
<td>14.94</td>
<td>12.57</td>
</tr>
<tr>
<td>Oromiya/Afan Oromo 1948,1948,1947,1944</td>
<td>Mean</td>
<td>41.61</td>
<td>42.84</td>
<td>48.43</td>
<td>43.59</td>
<td>39.33</td>
</tr>
<tr>
<td></td>
<td>Std dev</td>
<td>15.19</td>
<td>16.83</td>
<td>11.85</td>
<td>14.88</td>
<td>12.06</td>
</tr>
<tr>
<td>Somali/Somali 305,305,304,305</td>
<td>Mean</td>
<td>42.40</td>
<td>42.63</td>
<td>36.26</td>
<td>37.55</td>
<td>34.53</td>
</tr>
<tr>
<td></td>
<td>Std dev</td>
<td>14.52</td>
<td>14.52</td>
<td>8.23</td>
<td>11.72</td>
<td>10.14</td>
</tr>
<tr>
<td>Amhara/Amharic™ &amp; Amhara/ Afan Oromo 1023,1019,1016,1016,1026</td>
<td>Mean</td>
<td>39.07</td>
<td>41.30</td>
<td>48.33</td>
<td>44.59</td>
<td>41.79</td>
</tr>
<tr>
<td></td>
<td>Std dev</td>
<td>13.70</td>
<td>14.30</td>
<td>10.50</td>
<td>15.12</td>
<td>10.98</td>
</tr>
<tr>
<td>Bahasa Inggris 4277,4270,4248,4254,4276</td>
<td>Mean</td>
<td>39.43</td>
<td>35.93</td>
<td>35.93</td>
<td>37.28</td>
<td>31.53</td>
</tr>
<tr>
<td></td>
<td>Std dev</td>
<td>16.14</td>
<td>12.47</td>
<td>12.47</td>
<td>17.7</td>
<td>11.09</td>
</tr>
</tbody>
</table>

Table 7. Mean achievement scores by mother tongue versus English medium of instruction for three national assessments of Grade 8 students, Ethiopia

<table>
<thead>
<tr>
<th>Year of Assessment</th>
<th>MOI</th>
<th>No. students</th>
<th>English</th>
<th>Maths</th>
<th>Biology</th>
<th>Chem.</th>
<th>Physics</th>
<th>Av. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>MTs</td>
<td>1,570</td>
<td>37.41</td>
<td>42.73</td>
<td>57.85</td>
<td>45.41</td>
<td>45.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>3,529</td>
<td>39.07</td>
<td>36.20</td>
<td>42.40</td>
<td>38.00</td>
<td>38.92</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>MTs</td>
<td>3,744</td>
<td>40.65</td>
<td>42.60</td>
<td>47.30</td>
<td>43.19</td>
<td>39.62</td>
<td>42.67</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>4,265</td>
<td>41.43</td>
<td>39.43</td>
<td>35.93</td>
<td>37.28</td>
<td>31.53</td>
<td>37.12</td>
</tr>
</tbody>
</table>

91 Lewis, 2009
92 Heugh, Benson, Gebre Yohannes and Bogale, 2011
93 Adapted from MoE/NoE 2004 as cited in Heugh et al. 2011.
94 For these students, English becomes the Language of Instruction for Mathematics and Science in Grades 7-8.
Chapter 6 Mother-tongue Based Multilingual Education: A Global Perspective

The challenges reported in the Ethiopian context ring true with other similar multilingual programs. There was a need for greater amounts of mother tongue resources and reference materials, a need for training and curriculum development in the mother tongue, and a heavy financial cost to maintain several different language programs.

6.8 The Nepal Mother Tongue-Based Multilingual Program

Nepal is a diverse country, both in terms of geography, languages and ethnicities. There are over 140 languages\(^95\) and according to the Census of 2001 the literacy rate of children six years and above is only 54%. These conditions mirror the ones facing the Papuan educational system. In recent years there has been a major shift in educational policy in Nepal to introduce and include curriculum and instruction in the minority languages of the country (Phyak, 2010).

The program, initiated with funding from the Finnish Ministry of Foreign Affairs in 2006, is designed to implement “the use of L1 (first languages other than Nepali) as the primary MOI” for the whole of primary school while L2 (second language) is introduced as a subject of study to prepare students for eventual transition to some academic subjects in L2.\(^96\) The hope is that children will learn best with early instruction in L1 so that they become confident in academics as well as self-esteem.\(^97\)

The project in Nepal used a variety of teaching models in the multilingual approach from monolingual/mono grade teaching to multilingual/multigrade teaching. Because of the limited scope of this study the evaluation will look at only 2 of the pilot programs (Jhapa and Rasuwa) to show a general overview of results. A full report of each school can be found in Phyak 2012.

<table>
<thead>
<tr>
<th>Model of MLE</th>
<th>District/Language(s) /School</th>
<th>Features of classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model I Monolingual, Mono-Grade Teaching</td>
<td>Dhankuta: Athapahariya Rai in Grades 1-3 Shree Deurali Lower Secondary School</td>
<td>One teacher teaches all subjects (except Nepali and English) in Athapahariya Rai in one grade. Some teachers cannot speak Athapahariya Rai.</td>
</tr>
<tr>
<td>Model II Monolingual Mono-Grade Subject teaching</td>
<td>Kanchanpur: Rana Tharu in Grades 1-3 Rastriya Primary School</td>
<td>Separate teachers teach different subjects in children's mother tongue in one grade.</td>
</tr>
</tbody>
</table>

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\(^95\) Yonjan-Tamang, 2005  
\(^96\) Ball, 2010  
\(^97\) Benson, 2002.  
\(^98\) Phyak, 2011
### Model of MLE

| Palpa: Magar in Grades 1-3  
Nava Jagriti Primary School | All teachers can speak children’s mother tongue. |
|----------------------------|------------------------------------------------|
| Model III Monolingual  
Multigrade teaching | Rasuwa: Tamang in Grades 1-3 Saraswati Primary and Bhimsen Primary Schools  
One teacher teaches all subjects (except Nepali and English) in Santhal  
Lack of Santhal speaking teachers. |
| Jhapa: Santhali in combined class of Grade 1 and 2 Rastriya Ekta Primary School | Separate teachers teach different subjects in Uraw. All teachers can speak Uraw. |
| Model IV Monolingual  
Multigrade Subject teaching | Sunsari: Uraw in a combined class of Grades 2 and 3 Sharada Primary School  
Separate teachers teach different subjects in three languages. All teachers are multilingual. |
| Model VI Multilingual  
Multigrade teaching | Sunsari: Tharu/Maithili, Uraw and Nepali in Grade 1 Sharada Primary School  
One teacher teaches all subjects of two grades (except Nepali and English) in both languages. |
| Model VI Multi bahasa, multi  
kelas, guru kelas | Sunsari: Tharu/Maithili and Nepali in a combined class of Grades 2 and 3 Sharada Primary School  
Mengajar setengah hari dalam Bahasa Rajbansi dan setengah hari lagi mengajar dalam Bahasa Nepal oleh satu guru. |
| Jhapa: Rajbansi and Nepali in a combined class of Grade 1 and 2 Rastriya Ekta Primary School | Half-day instruction in Rajbansi and half-day instruction in Nepali by one teacher. |

### 6.8.1 Nepali Mixed Results

1. **Jhapa, Nepal**

The headquarters of Jhapa is the home of Shree Rastriya School which has a student population of a majority of Rajbanshi and Santhali speakers. This pilot project was initially received positively with discussion groups of parents, teachers and school administration realizing the relevance in their linguistic context. It was seen to help students learn more easily, increase regular attendance and decrease drop-out rates. Two models were chosen: monolingual/multi grade teaching (Santhali in combined classes of Grades 1 and 2) and multilingual/multi grade teaching (Rajbansi and Nepali in combined class of Grades 1 and 2).

The two main teachers of the Shree Rastriya School expressed significant areas of difficulty in maintaining the initial program. The obstacles they conceded were enough to halt the program. These included textbooks that were not sufficient for all grade levels, classroom management of multigrades, grammar books, teachers’ guides, lack of mother tongue teachers, lack of support from district offices for concrete plans of sustainability, lack of parents’ awareness and local committees to support resources, and inadequate teacher training especially in curriculum design. It was found that the classroom teachers had returned to instruction in Nepalese with students using the mother tongue for clarification only. (Pyak, 2012) The head master as well was disappointed in selection of the school. He expressed a need to have discussions and feasibility studies done in conjunction with the local community before implementing a multilingual program in a mixed linguistic situation.
2. Rasuwa, Nepal
The second pilot program was located in Rasuwa and interviews at both primary schools were conducted with parents, teachers and children after the initial program. The school settings were 100% monolingual in the mother tongue of Tamang. Children in Grade 1 knew almost no Nepali. The teachers interviewed spoke of many positive changes in the students since the mother tongue education began including the following: motivation to go to school, confidence to ask questions, regular attendance and the preservation of the local language and culture. Both teachers reported the lack of textbooks, dictionaries, teachers’ guides and story books. The head master of the school related the positive acceptance of the program as well, stating it should be compulsory until Grade 3, but expressed the urgent need for teachers who can teach all subjects in the mother tongue be recruited for long term sustainability.  

6.9 The Philippines
The Philippines’ Department of Education (DepEd) issued Order No. 74 on 14 Huly 2009, institutionalizing mother-tongue multilingual education (MTB-MLE) in formal education. The integration of multilingual education (MLE) will extend to pre-school and to the Alternative Learning System.

According to information issued by DepEd, studies show compelling evidence that children learn best when instruction at the primary level is in the first language, or mother tongue. This allows for better conceptualization and the development of deeper thinking skills. The DepEd will continue teacher training in mother tongue-based multi-lingual education, so that teachers will acquire a clearer understanding of the principles, practices, roles and responsibilities needed for the successful implementation of MTB-MLE.

A MLE Framework has been prepared for teacher, school managers, instructional quality assurance staff and education officials. Among the 10 fundamental requirements, the MLE Framework requires a working orthography or spelling for the selected local language that is acceptable to stakeholders; promotes intellectualization of that language; requires the development, production and distribution of inexpensive instructional materials in the language at the school, division, and regional levels, and; gives priority on early reading and children’s literature.

MLE is the effective use of more than two languages for literacy and instruction. The DepEd of the Philippines introduced a Bridging Plan to be used for reference during the first three years of MLE implementation.

6.10 Conclusion
There are valuable lessons relating to both policy and implementation that are pertinent to the Tanah Papua context. The following policy recommendations can be based on the country case studies referred to above:

99  Phyek, 2012
• An integrated policy that defines the roles of Indonesian, the Mother Tongue and English in the Papuan School System and up to which grade the Mother Tongue Based Multilingual Education (MTB-MLE) can be used
• MTB-MLE Policy Development that involves community, teachers, parents and KPGs in the decision making process
• Policy on identifying and selecting the schools best suited for MTB-MLE
• Development of a Department whose purpose is to facilitate the development of alphabets, MT curriculum materials, training of teachers and implementation of MTB-MLE programs and coordinating with local MTB-MLE committees.

In regards to the lessons regarding implementation, the following lessons apply to Tanah Papua:

• Prior to implementation, identify areas characterized by monolingualism
• Prior to implementation, ensure extensive consultation with the local community, private educational foundation schools and local schools. Discussions should begin with the community deciding whether or not it wants to have a MTB-MLE program. Other items to discuss if there is a decision to move ahead with MTB-MLE include a clear understanding regarding who is responsible for what
• Ensure the establishment of a local MTB-MLE Community Council
• Ensure adequate materials are produced before any program is implemented
• Ensure adequate training of teachers prior to implementation
• Ensure adequate numbers of teachers are available to teach MTB-MLE.
7.1 Language Context

The construction of maps is essential to coordinate and plan proper infrastructure in Papua. Whether this be roads, villages, schools or infrastructure projects, maps are crucial. This project is just a small part of what should be a more comprehensive mapping objective in a province where accurate maps are almost non-existent.

The aim of this initial report is not to map all of the villages in Papua but to collate data that may have a bearing on the choice of language used in elementary schools to introduce the skills of reading, writing and arithmetic to children who live in the rural and remote areas of Papua. This question presumes several more basic questions:

1. Where are the languages?
2. Are the languages still actively used?
3. How many people speak the languages?
4. Are there schools in these communities?
5. Where are the schools?
6. Are there languages that serve as a lingua franca that are mutually intelligible to a large number of the population?

Although much of the data of the final report has been collected by SIL, only some of it will be presented in this report. Final maps coordinating school locations with languages will be made available at the conclusion of this project (July 31st, 2013).

7.2 Scope of the Research

The maps presented in this research, at the request of the government, are meant to support strategic initiatives in those Papuan regencies defined by United Nations Research as falling below the human development index that marks Indonesia’s poverty line. This means the language, language vitality and schooling maps will focus on the following Papuan regencies: Deiyai, Yahukimo, Peguningan Bintang, Intan Jaya, Membramo, Nduga, Lanny Jaya, Yalimo and Puncak. Although this report will step outside the narrow parameters of “rural and remote” locations when painting the broad picture of the language
situation on the island of Papua, it will however restrict itself to its original mandate when discussing actual school locations.

Language maps will define existing language boundaries not only in rural and remote locations but in Papua and Papua Barat. The languages in these provinces have been assessed by SIL through the following methods: (a) Lexical similarity comparisons between the speech varieties used between villages and with villages of the neighboring languages; (b) using interviews with community members regarding perceived degrees of similarity and intelligibility between the surveyed villages as well as the perceived degrees of similarity and intelligibility between each language and the surrounding languages; (c) Interviews with community members of the surrounding languages regarding the perceived degrees of similarity and intelligibility between their language and the neighboring language. During these surveys, demographic data was also collected.

Language vitality maps were constructed in order to assess how close endangered Papuan languages are to the threat of extinction. This needs to be measured before any decisions on language choice in schools are made. UNESCO as well as SIL have pioneered much of the theory and methodology behind language vitality testing and the language vitality scale -- which could just as well be called the "language endangerment scale". The language vitality scale used in this paper comes from the UNESCO five point scale:

Language vitality in this paper was investigated through the following methods: (a) reported language use in various domains, both public and private (home, school, church, sports etc.); (b) reported language use of the younger generation for intergenerational shift; (c) reported indicators of language maintenance. Since language vitality overlaps with language attitudes, community attitudes to their language were also examined in the following ways: (a) reported attitudes toward the oral modality (b) reported attitudes toward the written modality of the language used in the local community, such as attitudes toward potential development of their traditional mother tongue to include written texts. Final results are tabulated in the maps presented in this paper.

In order to ensure high reliability and validity of the data, triangulation methodologies were used to evaluate if what was reported to the different researchers was also be observed in the community.

7.3 Language Map of Papua

Papua and Papua Barat have a combined total of 275 languages. While many of the language boundaries tend to stay the same over time, the language communities, especially hunter-gatherer communities, move from place to place pursuing game, and make the task of village mapping an inconsistent endeavor. Although small in number, some of these groups, have vast areas of traditional territory that comprises their traditional hunting grounds. The Elsing, for example, consisting of only three large families numbering between 300-400 people, comprise a territory larger than Sentani who number over 30,000 people.
The number of speakers in each language group range drastically, from 180,000 Western Dani, to the remaining two speakers of Tandai. Several languages are already extinct.

### 7.4 Preliminary Results of Language Vitality Mapping

Using the UNESCO scale above, the vitality of languages in Papua has been rated using the following modified scale:

1. **Safe**: The language is used orally by all generations and is being learned by children as their first language. There are 133 ‘safe’ languages in Papua.
2. **Threatened/Vulnerable Languages**: The language is used orally by all generations but only some of the child-bearing generation are transmitting it to their children. What is needed in these language groups is a decision by the community regarding the health and future prognosis of their language. A total of 39 languages are vulnerable and threatened.
3. **Severely Endangered**: The child-bearing generation knows the language well enough to use it among themselves but not all are transmitting it to their children. The only remaining active speakers of the language are members of the grandparent generation. From an educational standpoint, it may be more prudent to identify the language that is replacing the traditional mother tongue of the grandparents’ generation and use this as the initial vehicle for introducing literacy. Initial research indicates that Papuan Malay is replacing the mother tongue of many coastal groups, affecting 61 languages.
4. **Critically Endangered**: The only remaining speakers of the language are members of the grandparent generation or older who have little opportunity to use the language. There is no reason to introduce
literacy using the traditional mother tongue amongst these groups. These groups may want to introduce their traditional language as a second language. This affects 15 languages.

5. Dormant or Extinct: The language serves as a reminder of heritage identity for an ethnic community. No one has more than symbolic proficiency. No one retains a sense of ethnic identity associated with the language, even for symbolic purposes. This affects 6 languages.

6. Unknown: Because researchers have not been able to visit and ascertain the language vitality in all languages, there are still 20 languages where there is inadequate data to measure language vitality.

It should be noted that many of the smaller populations defined as ‘safe’ (under 1,000 speakers) are largely safe because they are isolated from extensive contact with Indonesian or Papuan Malay speaking people. However, these languages may be at great risk of becoming endangered within the next twenty years as roads, development and infrastructure are developed in their communities. Even today, speakers of small indigenous languages are coming into frequent and sustained contact with large population of immigrants who speak Indonesian or Papuan Malay. Such sustained contact leads to intermarriage, cooperative working environments, mixed schooling, and trade, all of which predisposes these small populations to cease transmitting their mother tongue to the next generation. Why? Primarily because they believe Indonesian will help their children succeed in the future.

The danger that roads and sustained contact with developed areas is undermining the vitality of languages is glaringly evident on the north coast road leading east and west from Jayapura. Twenty of the smaller languages along this road are no longer transmitting the mother tongue of the grandparents to the grandchildren.

If we use a population figure of 10,000 speakers as the accepted minimum standard for short term language vitality needed for one generation living in a non-isolated environment (Crystal, 2000:13), and since Biak and Sentani are already threatened, and, if Papuan development continues the pace it has in the last twenty years, it appears that only 13 of the 275 languages are under no threat of moving from ‘safe’ to ‘vulnerable’ status in the next generation with is no intervention. This means of course that only 4.7% of Papuan languages are safe for the next 50 years!
The challenge of providing basic education for all according to the EFA and MDG mandates, is more difficult to achieve among the isolated Papuan communities who often cannot speak fluent Bahasa Indonesia. While this commitment is being fulfilled in urban and coastal areas, it still remains inaccessible to many remote and isolated Papuan communities. Making progress on this promise means addressing several critical concerns: (i) solving chronic principal/teacher absenteeism; (ii) continued development of school facilities; (iii) training cadres of teachers whose calling and education is specifically focused on rural and remote communities; (iv) continued engagement with the educational yayasan, and (v) ensuring that education is provided in a language that is understood in isolated and rural communities. In order to accommodate rural and remote children’s unique linguistic concerns, the governor has enacted Article 21:2 stating, “If Bahasa Indonesia cannot be used as the introductory language in delivering education, the local language can be used as the introductory language.”

The government’s sensitivity to the crucial role the local context plays in more than one hundred linguistically isolated Papuan communities can be most effectively addressed by (a) implementing key rural and remote educational policies and (b) implementing several structural changes as suggested in the Strategic Options section below.

7.5 When is a Language Too Small for MLE?

One of the difficulties in Papua is deciding whether schools should be encouraged to adopt multilingual education programs for small languages that often have just a handful of speakers in a school and which, if combined, would result in multiple language instruction in one class. Issues of sustainability, cost, administrative difficulties and the viability of a critical mass of students in the classroom all play into this question. The government has decided that when languages have less than 1000 speakers, MLE will be limited to oral use only, meaning that teachers can explain things in the mother tongue but no effort will be made to publish curriculum in these languages.

7.6 Papuan Malay: The New Lingua Franca

Traditionally Papua had certain languages of wider communication that were used for trade between regional groups. These traditional languages included Isisrawa, Arguni, Wandaman, Western Dani, Biak, Fayu, Wano, Momuna, Kowiai and Yetfa. The reality is that with the exception of Western Dani, all these languages are being replaced by the new lingua francs: Papuan Malay.

It is estimated that approximately 1 million people have some form of Papuan Malay as their mother tongue, but that numerous others can speak it as a second language. It is the language used when people of different mother tongues come together in the market, on the soccer field or when they travel to a district or regency capital to buy or sell. It also tends to be the dominant language of the home when coastal groups of different languages marry one another.

Choosing Papuan Malay as one of many Papuan languages in which to introduce reading, writing and arithmetic could affect more illiterate and pre-literate Papuans than any other multilingual education program.

7.7 Total Potential Languages to Develop for Multilingual Education in Papua

Factoring in language vitality and the government’s decision to limit curriculum development to languages over 1000 speakers a clearer picture emerges regarding the nature of potential MLE decisions in Papua. If

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101 James Madouw, Papua Director of Education, Culture and Sports, in a meeting on March 25th, 2013.
only safe and vulnerable language are developed that have more than 1000 speakers, the total number of languages to be developed for use in elementary school would number as follows:

**Map 5. Papuan Malay Speakers**

![Map of Papuan Malay Speakers](image)

**Table 9. Language Types**

<table>
<thead>
<tr>
<th>Language Types</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Languages numbering over 1000 speakers</td>
<td>70</td>
</tr>
<tr>
<td>Languages with Unknown Vitality numbering over 1,000 speakers</td>
<td>11</td>
</tr>
<tr>
<td>Total Potential Languages to Develop</td>
<td>100</td>
</tr>
</tbody>
</table>

While 100 languages out of a total of 275 languages is a drastic reduction in the multilingual education task, many challenges still remain. These challenges concern the development of alphabets (orthographies), curriculum, teacher training and nurturing appropriate administrative structures.

For a review of Language Mapping conducted by SIL in Tanah Papua, its methodology and examples of local language maps and school locations, see Chapter 12 on Promising Local Practice and Annex C for the full report on “Papuan Languages, Language Vitality and School Mapping”, by Joos Pikkert and Jacquiline Menanti, SIL, 2013.
Chapter 8
Moving Forward In Mother-Tongue Based Multilingual Education for Papua

8.1 Policy Issues

An integrated policy is necessary that defines the roles of Indonesian, the Mother Tongue and English in the Papuan School System and up to which grade the MTB-MLE can be used. MTB-MLE Policy Development involves community, teachers, parents and KPG in the decision making process.

A challenging area where educational structure intersects with the administration of MLE programs is in teacher transfers, especially once the teacher is a regular government employee (PNS). If a teacher happens to come from a small language group and be one of the few people in his local language qualified to teach in the local language but requests a transfer, it places the entire MLE program in jeopardy.

Teacher absenteeism has been proven to be a problem in Papua. One in three teachers in Papua are absent with the figure being one in two in the highlands. When we factor in the reality that an effective MLE program needs a teacher who speaks the local language, the following quote from the Teacher Absenteeism Study should give us reason to pause.

Based on weighted estimates for the ‘place of origin of parents’; teachers most absent were those whose parents originate from either the teacher’s school village area (43%) or the same sub-district/district as the school (44%). Teachers whose parent’s origins are within the same province but not the same village or sub-district as the schools had a 34% absenteeism rate, while teachers whose parents originate from outside of Tanah Papua had an absentee rate of 21%. The non-Papua grouping also has the lowest absentee rate across all district and sub-district geographic categories, including highland districts (24% compared to 40% for native Papuans).

The challenge that should be factored into any MTB-MLE program is the challenge of teacher absenteeism given the fact that teachers originating from the local area are twice as likely to be absent as those not from the local area. One possible solution is to strengthen the school committees that presently have more of a consultative and fundraising goal to granting them greater responsibility and authority for matters related to the school’s success. This would entail formal contractual obligations by the local school board to nurture the success of the school as it relates to parental involvement and support as well as allow them to hold the teachers and principals accountable for attendance. Such a body could also play a pivotal role in encouraging children to go to school, provide a place to nurture reconciliation between principals and teachers and be responsible for providing parateachers for local language literacy.

102 We Like Being Taught: A Study on Teacher Absenteeism in Papua and West Papua. A UNICEF Sponsored Study p. 132
103 Ibid, p. 49
8.2 Policy on identifying and selecting the schools best suited for MTB-MLE

Development of a Department whose purpose is to facilitate the development of materials, training of teachers and implementation of MTB-MLE programs.

Educational outcomes in specified subjects have been standardized by the Indonesian government. However, this does not include ‘muatan lokal’ or ‘local content. Decision on the nature and use of local content are made at the regency (kabupaten) level. This therefore means that any endeavor to implement MLE in a specified language needs to gain approval at the regency level. Since many languages cross regency borders, decisions made by one regency may not affect all the people in a particular language group. For example, if the Irarutu people want an MLE program in their schools, they would need to gain approval from the regencies of Teluk Bintuni, Fak-Fak and Kaimana. This not only complicates how curriculum is budgeted (because different regencies would pay for it), but affect efficiencies of teacher training and administration of the programs. Further complications arise from the fact that many language groups straddle different provincial boundaries (and some straddle the border with Papua New Guinea).

8.3 Implementation Strategy

Learning from the international experience, the following sequence is suggested for the implementation of MTB-MLE in Papua:

• Map Languages, Language Vitality and Schools;
• Conduct an extensive survey of the communities, parents and tribal leaders with the intention of raising awareness regarding MTB-MLE issues facilitate community desires regarding MTB-MLE for their Community Schools;
• Establish of MTB-MLE Committees;
• Develop Mother Tongue Orthography/Alphabet Development
• Design and produce instructional materials (see Box 1).

Languages in Papua are in various stages of development. Some have excellent multilingual curriculum that introduces literacy in the local language and bridges into Indonesian, others have mother tongue (MT) language curriculum that makes no attempt to bridge to Indonesian, while other languages are still strictly oral and lack the most basic of linguistic analysis. In order to facilitate development of oral languages into a written form the first step is creating an alphabet. The most expedient approach would be to encourage related language clusters to work together and adapt materials from one language to the next. This could best be done through the model developed in Papua New Guinea where linguists with expertise in orthography development guide participants from related unwritten language through an analysis of their own language to discern the most appropriate orthography to write their language.

8.4 Reading Curriculum Development

Research indicates local language curriculum has been developed in many Papuan languages over the years (see appendices). However, since this was done largely by national and international NGOs as well as religious groups that did not consult with the government, many of the MLE curriculums are very different in structure, based on different philosophies of reading education, including the phonetic approaches, Gudchinsky method, Whole Language and Multi-Strategy approaches.

Differences between the curricula also demonstrate the underlying theoretical differences in how letters and sounds are taught that don’t exist in Indonesian languages, or Indonesian sounds that don’t exist in the local language. Regarding local content, some have very good local content, including folk tales, myths and stories highlighting local people and geography while others are devoid of local content.
The government needs to make a decision whether the basic structure of all multilingual educational material needs to be similar in order to best prepare teachers to teach from a standard curriculum or whether to develop the disparate MLE curriculum models presently in use. A standard approach to MLE curriculum development would help in how teachers are trained in MLE methods in Teachers Colleges. It would give them some surety that when they arrived in a community they would not need to re-learn how to teach reading because the structure of the reading curriculum was matched to what was taught in Teachers College. It would also help trainers needing to facilitate local people to become MTB-MLE instructors in their own language to train from a curriculum that was consistent between languages.

Experts in curriculum development, linguistics, reading and design would need to work together to address the many languages in Papua. This however may be more cost effective than encouraging illiteracy among students who can’t understand the language of the classroom and its curriculum.

Standardization of curriculum would necessitate regencies working together since a common standard would have to be implemented for languages that cross regencies and provinces.

8.5 Curriculum Needed for MTB-MLE Success

Provincial boundaries. The most effective way to accomplish curriculum development would be to initially make the following series of pedagogical decisions:

i. A common standard philosophy of teaching reading
ii. A common approach to writing non-Indonesian sounds
iii. A common approach to how letters are introduced and in what order
iv. A common series of reading exercises meant to enhance reading fluency
v. A common layout/design
vi. A common approach to teacher training
vii. A common approach to program evaluation

8.6 Growing up “Print Poor”

Rural and remote locations in Papua are “print poor.” It is important therefore that any MLE approach be coupled with the promotion of indigenous authorship in order to nurture a print culture. If indigenous authorship is not encouraged, and if the sole reason for learning to read is to facilitate the ease of reading in Indonesian, the MLE program may actually be a tool for encouraging extinction or replacement of the local language by Indonesian or Papuan Malay.

8.7 Piloting MTB-MLE in Schools

Multilingual education can best move ahead if model programs are established that allow teachers and student teachers to observe and be mentored in quality programs. This means that model programs should be established in languages that have a high vitality and which are located in the vicinity of each teachers college (Nabire, Sorong, Timika, and Merauke). It may be prudent to establish a new teachers college in Wamena in order to reduce travel costs and address the many the mountainous languages.

By targeting some of the larger languages, all of which have developed orthographies (and some which have some MLE curriculum created by NGO’s) the greatest impact can be felt in the shortest amount of time. It will also allow those volunteer teachers to share from their experiences to the ones that they are asked to mentor.
8.8 Moving ahead in the Highlands

The following steps are suggested:
1. Have a series of consultations with the Dani people to see if they want to use their local language as a language of instruction in school;
2. Review Dani language curriculum and adapt it as necessary (Dani Western, Dani Mid Grand Valley and Dani Lower Grand Valley). This will affect the largest numbers of people in languages that have sufficient numbers to retain a high level of vitality for the foreseeable. Ensure entire reading curriculum and modes of testing are drafted before the pilot project is launched.
3. Begin a pilot project in one school after curriculum has been developed. Train the teacher for one week just before the school year begins (check the Op Anggen school in Bokondini (see Chapter 12) – it has received high praise but presently is not using any local language curriculum but is open to exploring this possibility).
4. Meet with implementing teachers monthly to evaluate the curriculum.
5. During the school year, have a “Danı author workshop” to create more reading material (include an editing committee).
6. Have a Dani Reading Competition to promote the idea of Dani literacy
7. At the end of the first six months, implement initial curricular changes so that the program can be expanded in the next school year to more schools
8. At the end of the school year, make changes to the curriculum as per teachers experience as well as based on student test scores.
9. Have teacher training workshops for other schools in the summer, using teachers who taught the initial curriculum as well as other teaching professionals
10. Work with Kabupaten officials and the Department of Education, Culture and Sports to repeat the process in other languages
11. Take the best MLE teachers and offer them a position in the KPG to teach MLE to future teachers.

8.9 Kolese Pendidikan Guru (KPG) - Teacher College Training - and MTB-MLE

The question that needs to be asked is whether the KPG colleges, intended to provide teacher training for teachers of the schools in the rural and remote areas, are preparing teachers to address the multilingual realities in Papua. Unfortunately, the answer is that they do not. The KPG curriculum has been largely thrust on these unique and potentially invaluable institutions by the accrediting university, UNCEN.

The result is a “Cenderwasih approach” that was never meant to address the unique needs of the isolated language communities of Papua. At the present, the faculty of the KPG is overwhelmingly non-Papuan (see Chapter 4 above) and the students that graduate are predominately from language groups originating outside the province of Papua. Many of the students that the province hoped would be educated in these schools are not able to complete their education because of educational deficiencies and cultural problems.

If the KPGs are going to align themselves with a multilingual education mandate, it is imperative that two classes be included in the curriculum. The first is a class in language acquisition for all those non-Papuan students who plan to teach in monolingual settings. The second needed class is in multilingual education.

8.10 (Re)Training Teachers

Cultural aspects of learning and teaching in Papua have unfortunately been largely ignored in favor of western models of classroom teaching and learning. The result has been a plethora of books, teacher’s guides and lectures that have largely ignored indigenous learning and teaching styles. In remote and rural communities, books are largely missing and so children have the added hurdle of having to adopt of foreign learning style through the educational process. What is needed is for education to factor in traditional learning styles in an effort to nurture the ability to learning through print.
8.11 Papuan Learning Styles

Traditionally children in Papua learn by initially watching something multiple times (carving a canoe or statue, making a fire, building a house etc.). Then they try the skill on a small scale (elementary school children hunting grasshoppers with their bows and arrows, children carving mall objects, girls experiment with cooking or keeping a small garden), finally moving on to being invited to take part in ‘the real thing.’ It mirrors the apprenticeship model of the west.

Teaching and learning processes in rural and remote areas need factor in traditional teaching and learning styles. Since these remote locations are not ‘print rich’ (few homes have bookshelves, people don’t read on the bus, and expendable income is seldom spent on books), and teachers originating from these areas are seldom an exceptions – they also grew up with a dearth of printed materials in their communities, have little access to ongoing interesting material or consistent internet access and no access to libraries. Any teaching methodology therefore, with the children or in prospective MLE teacher training should not depend primarily on having teachers decode teacher’s guides or other books, expecting the teachers and students to seamlessly apply the published ideas and methodologies effectively in class.

What is of critical importance in the development of teaching skills is to demonstrate, several times, how to effectively teach the desired curriculum. After it has been shown and explained, the teachers need to be mentored in how to teach the curriculum, (have them teach one another several times) moving on to ‘going solo’ while the mentor stands in the wings ready to encourage, help and direct. If this is not undertaken, teachers will teach how they were taught (lecture approach) resulting in inadequate classroom skill development.

8.12 Gender and Teacher Training

Recent analysis in the Teacher Absenteeism study as well as data from the Papuan Department of Education and Culture indicates women are more likely to persevere in remote and rural locations and more likely to have a lower absenteeism rate. Teacher training should therefore encourage women teachers.
Chapter 9
The Promising Potential of ICT in Education in Rural and Remote Areas

9.1 Introduction

There is an existing national policy to strengthen and expand the use of ICT in the education sector:

The use of ICT is believed to be supporting in efforts to increase and equalize access to education, improve quality, relevance and education competitiveness, along with management, accountability, and public image towards education. Application of ICT for education by (the Ministry of Education and Culture) can expand the affordability of education and strengthen governance at the same time.104

One of the biggest opportunities and challenges to ensure equitable development in all countries is to connect rural and isolated communities to modern communication grids, whether for telecommunications or Internet. This is in fact a priority target in ASEAN’s Master Plan on ASEAN Connectivity, and “connect(ing) villages with ICT and establish community access” was the first priority in ITU’s World Telecommunications/ICT Development Report, 2010 and in subsequent annual reports.105 There are three critical factors impeding the spread of ICTs to rural and remote communities: solution must be found to address the problems of infrastructure, content and finance. It is not only important that populations in these difficult to reach areas are not excluded from the “Information Society”, they are the ones that stand to benefit the most from access to and use of ICT connectivity to ensure that service delivery in sectors such as education, health, and other sector reach the most in need. The geographical situation combined with poverty, hinder Access to ICT services but these technologies have a potentially a powerful role to play in the delivery of development services and their quality improvement.106

9.2 Papua: ICT Policy and Implementation

In Papua, Internet connectivity is dependent on relatively high cost Satellite links and currently low-speed connection via V-SAT107 (costly approximately $600/month for 128 Kbps). However, in future, the current laying of the “Palapa Ring” of fibre-optic cable at coastal and urban areas108 would offer a considerable lower cost and higher speed of connectivity for Tanah Papua. This future development should certainly be considered in any medium-to-long term strategy for education in the area as it would have a major impact on opening up broadband connectivity in the rural and remote areas of Tanah Papua.

104 From Chapter IV of the 2010-2014 Strategic Plan (Renstra); Strategy and direction of national education development policy year 2010-2014.4
105 Published by the International Telecommunications Union (ITU), Place des Nations, Geneva, Switzerland."105
107 Very Small Aperture Terminals (VSAT) networks provide cost effective one or two way links via satellite over a wide geographical area.
108 Palapa Ring is the construction of a fiber-optic network (“broadband”) connecting major islands in Indonesia (see “Ground-breaking Inauguration Fiber Optic Broadband Network Construction or Palapa Ring Broadband, Sulawesi-Maluku-Papua in PT Telkom”, May 29, 2013..
According to the World Bank supported Strategy for ICT Integration in Education in Papua, effective deployment in Papua has the potential to address key barriers that impede the improvement of education in the province:

(i) The Internet can connect the provincial office, district (kabupaten) and schools through the province. Although there are formidable challenges still with the rolling out of Internet access to all schools, it should be possible to provide at least low-speed connectivity to most communities and schools, to enable email messaging and downloads of materials of limited size.

(ii) Increased communication and information sharing can help improve low-performing schools by strengthening provincial, district and sub-district management, while supporting school management and monitoring to increase accountability.

(iii) Digital curriculum resources and distance education can help all teachers, but particularly those low-performing teachers or those most in need of upgrading and certification. Increasing continuous professional development can be accomplished most effectively through ICT and can be combined with access to high-quality learning resources to upgrade qualifications and to improve practices in rural and low-performing schools.\(^{109}\)

The Government of Papua has expressed a strong commitment articulated in a provincial “ICT in Education Strategy and Implementation for Papua”\(^ {110}\) and the establishment of an ICT Secretariat for coordinating and reporting to the head of the provincial education office in Papua. A broad-based partnership is also being led by the education office and supported by the Governor’s Office, MoEC, Pustekkom (the Communication & Technology Center for Education), Higher Education Institutions such as UPI & ITB), the World Bank, SEAMOLEC, UNICEF and USAID: \(^{111}\)

- Since 2010, the Office for Empowering Village Community of the Papua Province, has distributed television sets, solar panels, DVD players, electricity generators and learning CDs for community education (non-formal education);
- Since 2006, through cooperation with Pustekom, DPTIK has distributed educational television sets, solar panels, generators, TV, DVD players and internet network to 600 schools at the SD, SMP and SMA/K level;
- Since 2007 In cooperation with the World Bank, has compiled “Book on Information, Communication and Technology (ICT) for the Education Implementation Strategy and Plan in Papua” as well as technical assistance in the development of ICT in education at the Provincial and District level;
- In 2011, in cooperation with USAID-SERASI, DPTIK has also developed a learning model based on ICT specifically designed for Papua via 6 V-Sat in six classes in Yahukimo District. (see Table 10 below for details).

In addition to these initiatives, under funding through the RESPEK Program, \(^ {112}\) equipment such as television sets, radios, satellite dishes, and DVD players) have been distributed to over 1500 Community Learning Centers (CLCs) in villages for distant learning program on literacy and life skills for adult learners. Local facilitators provide mentoring/coaching for life skills enhancement by integrating the use of ICT. However, the use and impact of this equipment, dependent on the availability of suitable content, remains to be assessed.

Policy has generally focused on piloting in the more affluent and connected areas of Papua where facilities such as power are available for the installation and use of ICT. To date, therefore ICT has not supported the areas facing the highest inequities such as in the highlands. An exemption to this has been the case of a pilot project launched in 2009 in Keerom District which has provided the power, ICT infrastructure and broadband connectivity to six ICT centres and 60 participating feeder schools. This project, facilitated by the University of Education, Indonesia (UPI) and the Institute of Technology Bandung (ITB), delivers in-service teacher development by means of blended learning (face-to-face learning, weekly online sessions,


\(^ {110}\) Ibid.

\(^ {111}\) See James Modouw, "ICT Integration in Papua", presentation to the ASEAN Rural Connectivity for Education and Development Conference, Hanoi, Vietnam, September, 21-23, 2011; and also “Situation Analysis of Education in the Province of Papua” (Presentation to the Workshop on Education in Rural and Remote Areas of Tanah Papua, November, 2012.

\(^ {112}\) Rencana Strategi Pengembangan Kampung – Villages Development Strategic Planning.
and classroom observations in virtual classes) focusing on instructional skills in teaching Mathematics and Science.\textsuperscript{113}

In summary, the province has been investing in ICT in its schools, with over 2,500 technology tools having been deployed into schools since 2006. The table below provides data of technology hardware investments that have been made to date by the province.\textsuperscript{114}

<table>
<thead>
<tr>
<th></th>
<th>2006 &amp; 2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>358 SMP/MTs</td>
<td>200 SD</td>
</tr>
<tr>
<td>TV</td>
<td>486</td>
<td>400</td>
</tr>
<tr>
<td>TVRO</td>
<td>296</td>
<td>200</td>
</tr>
<tr>
<td>Generator</td>
<td>160</td>
<td>-</td>
</tr>
<tr>
<td>PLTS</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>DVD Player</td>
<td>349</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,341</strong></td>
<td><strong>800</strong></td>
</tr>
</tbody>
</table>

In addition, 1,517 teachers at all school levels received some kind of ICT in education training between 2008 and 2010. This has included the following modules:

- Module 1: Basics on ICT for teaching and learning
- Module 2: Using the Internet for Teaching and Learning
- Module 3: Use of EdukasiNet (which is now replaced by Rumah Belajar)
- Module 4: ICT-based learning strategy
- Module 5: Developing lesson plans to integrate ICT in teaching and learning
- Module 6: Developing presentation media for teaching and learning\textsuperscript{115}

As part of the provincial plan for the use of ICT in Papua, a valuable contribution has been made to link information from the research on “educability” of children in the province, available funding support for community services and infrastructure, need for ICT based learning, and their application to the specific needs of the different geographical areas of city, rural, remote and isolated zones (see Figure 11 below).

![Figure 11. Use of ICT for Education in the Province of Papua](image)

Source: James Modouw, Presentation to RRA Education Workshop, November 2012

\textsuperscript{113} See Modouw, 2001 (ibid) and World Bank 2009 (ibid)
\textsuperscript{114} ICT in Education Evaluation of Papua – A Brief Concept Overview, The World Bank, June, 2013
\textsuperscript{115} The World Bank, 2013. Ibid.
Chapter 10
Results of the Provincial Workshop

10.1 Introduction

Multiple challenges to extending educational services to close the equity gap in Tanah Papua were identified during a workshop on “Education in Rural and Remote Areas of Tanah Papua” supported by UNICEF and ACDP in Jayapura, Papua, from 1 to 7 November, 2012. The main objectives of the workshop included (i) focusing attention on the growing inequities in the region and engaging a broad cross-section of stakeholders in discussing how to close the equity gap through education in remote and isolated areas of Tanah Papua; (ii) enhance awareness of what is being done, what needs to be done, and what we need to know to improve effectiveness of the education system(s); and (iii) support the harmonization of Provincial and District initiatives with national policies and regulations (such as the Perdasus) through strategic planning and on-going monitoring of practice.

A general overview of the challenges faced in the provision of basic education in rural and remote areas was presented at the workshop. These included the following:

1. Lack of Access: A high proportion of villages in remote areas are without primary schools and access to school often involves travelling long distances between home and school. Because of the rigidity of school schedules and timetables, time in school often conflicts with the agricultural calendar and other economic activities. Other major constraints to access are the direct and indirect costs of uniforms, instructional materials, transportation, food and the opportunity costs of losing the child’s support in the household or in the fields. Language issues were also identified as a major impediment: the indigenous communities do not speak or understand Bahasa Indonesia in the classroom, High teacher absenteeism also of course impacts on student absenteeism adding to the disincentives of distance from home, language difficulties, inflexible scheduling and the poor state of repair of the school itself and lack of facilities.

2. Further challenges were identified as an irrelevant curriculum, teaching and learning materials (geared more towards national needs and standards rather than the local context), the critical shortage of teachers and the inability of schools in these areas to attract, deploy and retain qualified teachers, particularly female teachers, the limited training for local indigenous teachers, and the lack of school leadership and support for teachers. The pedagogy employed by teachers in these rural and remote areas were invariably passive, frontal methods that were not appropriate for the cultural context and the curriculum and language used in the schools alienated the students further from the school.

3. Low community participation was also emphasised; parents and communities are rarely involved in school management or in the children’s learning processes either in the school or at home.

Challenges and recommendations to closing the equity gap identified in the workshop have been divided into five areas in the following sections. Interestingly, the workshop participants felt that although

geographic differences are important, and certainly are the most commonly cited as the main factor limiting the quality of education, access was not the biggest challenge cited by participants. Workshop participants cited the welfare of teachers as the dominant concern, followed by policies, budgeting practices and governance. Third in the list of priorities was the concern with access and the need to overcome the diversity of geographic conditions. Next, issues involving language and culture were addressed. The following is a summary of the discussions over the two and a half days.

10.2 Teacher Welfare

One of the biggest problems cited by Workshop participants was the absence of dedicated teachers, committed to the education of the children in remote and isolated areas. The UNICEF-sponsored research on teacher absenteeism reviewed in Chapter 5, identified several issues that contribute to the problem.

However, besides teacher absenteeism, other issues identified by participants were:
- Low qualifications of teachers
- Lack of a career ladder for teachers in-service in the remote and isolated regions
- Inefficiencies in teacher hiring and distribution that results in imbalances and low quality
- Need for a system to reward accomplished teaching and to improve performance of low quality teachers.

To address these issues, Workshop participants made several important recommendations. These included:
- Recruiting teachers from the remote and isolated villages
- Enhancing the role of Indigenous Teacher Training Colleges
- Developing a career ladder for teachers beginning with post-high school internships to teacher leadership roles
- Mapping schools and teacher qualifications
- Commission to Study and Advocate for Improvements in Teacher Welfare
- Rewarding and promoting teachers based upon progress in student learning
- Fostering better cooperation between government, NGO’s, and Yayasan to improve the availability of qualified teachers in remote and isolated areas.
- Introducing non-formal and informal education strategies in the most isolated areas, involving village members as teachers.

Presentations at the Workshop on international best practices also provided insights into strategies for addressing the need for more high quality, dedicated teachers in the rural sector. For example, Malaysia faced similar challenges of teacher absenteeism and low enrollments. To address these concerns, particularly to overcome the obstacles to teacher absenteeism, a number of effective strategies were introduced. In Laos, similar strategies were introduced to improve the availability of qualified teachers in remote and isolated areas. The following list includes the most effective “best practice” in education for rural and remote areas from these countries.

10.3 Policy, Budgeting and Governance

The second area of priority importance for the Workshop participants was the broad category of government policies, budgeting practices and governance systems. Overall, the concern was for systems that are more aligned to the conditions and needs of Tanah Papua, committed to and accountable for the development of the remote and isolated regions, and rationalized in terms of their effectiveness to contribute to development objectives at each level of governance in the current decentralized governance structure.

Some of the challenges to education cited by Workshop participants were:
- The process for school construction needs to be thoroughly reviewed and restructured. Several participants suggested that government schools are sometimes built next to yayasan schools that are already well established and providing a useful service. Other times, outside contractors are
hired to build a school, without involving the local community, causing conflict and contributing to community apathy and lack of ownership of the school. The investment in building a school in a community is also an opportunity to enhance community involvement in the education of their children, which includes preparing for and looking after the welfare of teachers.

- Governance structures since decentralization seem to have contributed to increasing the equity gap rather than closing it. Roles and responsibilities are not clear particularly with regard to District and Provincial responsibility for educational development. Roles need to be rationalized to improve efficiency. This includes disbursement of funds so they reach schools and teachers in a timely manner and do not require the teachers or principal to leave the school for long periods of time.

- Despite decentralization, many government regulations are highly centralized and do not fit the Papua context or contribute to improving educational quality. Therefore, the Special Autonomy should contribute to adapting policies to fit the local context. However, such changes require a scaffolding approach to encourage and support systems in Papua to accelerate development to meet national standards.

- Related to governance structures is the role of leadership, particularly traditional community leadership and indigenous councils. Decision making on educational planning and development must involve indigenous councils and traditional community leaders if education in remote and isolated areas is to succeed.

- Several challenges related to budgeting were raised by Workshop participants, particularly the lack of a funding structure that reflects the real cost of education in remote and isolated areas. Schools receive the same budget whether they are in urban or rural-remote areas. The cost of transportation, availability of services, and a “hardship” allowance for teachers who leave their families, travel long distances, and accept accommodations that are inconvenient should be recognized and included in costing and financing schools in remote and isolated areas.

The sentiments of most of the workshop participants may best be summarized by the words of one participant who focused on lax implementation:

“In most parts of Indonesia, especially in difficult places like Tanah Papua, the education problems related to education…are usually caused by the low discipline of implementing the existing policies and regulations due to lack of or inadequate monitoring and supervision.”

Since at least 2007, the Government regulation has designated the Provincial and District Governments as sharing responsibility for the education system. However, as several Workshop participants pointed out, the two systems have not yet reached an optimum level of performance in terms of cooperation, consistency, and effectiveness. The current UNICEF Papua Education Program has focused, at least in part, on improving the capacity of staff at different levels of the governance system. Global practices on governance reforms promoting decentralization as a method of improving educational services identify a range of strategies related to planning, budgeting, transparency and accountability, and school autonomy. While training has been beneficial for improving individual performance, it is less satisfactory as a strategy for systemic change. And, most would agree that to accelerate education development will require a systemic change.

10.4 Access

Although geographic barriers, distance, and critical mass are challenges that most frequently come to mind when thinking about education in remote and isolated areas, they were not the most important challenges to be addressed, in the view of most Workshop participants. Nevertheless, they are important and do pose significant obstacles to progress. Some of the major issues that were identified are:

- Need for better information on the number and location of villages that are currently not served at all by education, whether government-sponsored or provided by another entity.
- Clarifying the terminology of classification and recommending using urban, semi-urban, remote, and isolated and outermost regions.
• Going beyond geography to include other indicators of access such as the means and cost of transportation; communication; availability of electricity; and religion and culture.
• Introducing a Minimum Service Standard that is realistic and meets the Papua context. A minimum standard should be developed for Papua that identifies the minimum in terms of access, communication, cost of transportation, etc., for each community.

10.5 Culture and Language

A critical issue that parallels the challenge of access is the diversity of languages and cultures in Papua (see Chapter 7 on Language Mapping). Therefore, the challenge is not just the provision of schools, but providing educational services in a language that can be understood by the students, in a manner that is congruent with and responsive to the culture of the home and the community. Some of the issues and recommendations identified in this area are:

• In some villages, families migrate, so schools close because there are no more children.
• School curriculum does not adequately reflect local cultural values.
• Contracts for infrastructure projects given to outsiders causes friction with the local community and apathy for communities to take pride and ownership of schools.
• Investigate the school curriculum and determine the degree to which it is congruent or incongruent with local cultural values.
• Strategies to increase participation of women in education and school activities should be supported.
• Use local customs and roles to develop character, moral values, and to deliver life skills.
• Invite elders to schools to teach local culture and art.
• Invite community members with cultural skills (singing, dancing, painting, etc.) to teach these skills in the school.
• Concrete examples of performance standards should be provided so that traditional institutions can be involved in measuring progress – need to involve traditional leaders and indigenous councils in supporting and holding schools and teachers accountable.
• Examples of the ways that local leaders can support education are:
  o Look after the welfare of the teachers
  o Encourage a communal spirit of togetherness, especially in advocating for education and getting funds for education
  o Ensure that education is a part of community development
  o Ensure that the children attend school regularly, especially the girls
  o Restrict the marriage of children
• Promote the development of more locally controlled schools (i.e., charter schools) that utilize local content.

10.6 Conclusion

As the issues related to teacher welfare, policies and governance, access and language and culture suggests, the discussion in the workshop was very rich. After having raised awareness of the issues and soliciting recommendations, participants challenged the leadership to continue their efforts to propose actionable items for change.
• Special allowance for teachers in remote schools, which was meaningful and arrived on time
• Assurance of adequate housing for teachers in remote regions
• Continuous professional development located near the duty station so that teachers could continue to advance their professional qualifications without leaving the school site
• Use of technologies such as V-Sat to link teachers to family and professional communities
• Establishment of minimum standards for all remote schools that included accessibility, accommodations, communications, etc.
• Village Education Development Committees to assess the quality of schools, participate in school development planning, and to address obstacles to access and other barriers to quality.
A number of established principles of “best practice” were drawn from an analysis of international programs for the improvement of access and quality of basic education in rural and remote areas. In preparation for the Workshop, a paper was prepared on Innovative Models for Rural Education. In this paper, a number of country programs were referenced, including the following:

### Table 11. Instrumental Experience: Key Lessons Learned

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Highlands Children’s Education Project</td>
<td>• Instruction in local languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Local adaptation of the curriculum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student-centered learning around local events and activities</td>
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<tr>
<td></td>
<td></td>
<td>• Local Recruitment of teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community Participation in school management (including local chiefs)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Addressing Teacher Shortages in Under-enrolled schools</td>
<td>• Remote School Incentive Allowance</td>
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<tr>
<td></td>
<td></td>
<td>• Infrastructure and facilities including ICT (V-SAT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Scholarships: Poor Children’s Trust Fund, Pocket Money</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program and Additional Food Program</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Schools of Quality: The Lao Child-Friendly Schools</td>
<td>• Targeting areas of high poverty rates and ethnic groups, girls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and other disadvantaged groups with poor access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• School mapping with communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Relevant curriculum and pedagogy (slates, life-skills approach, use of local resources)</td>
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<tr>
<td></td>
<td></td>
<td>• Building on child-friendly school concept (clean, healthy, safe,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>protective, stimulating)</td>
</tr>
<tr>
<td>China</td>
<td>Gansu Basic Education Project</td>
<td>• Designing and provision of “Children’s Schools” — schools design</td>
</tr>
<tr>
<td>(Gansu Province)</td>
<td></td>
<td>and environment to suit children</td>
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<tr>
<td></td>
<td></td>
<td>• School Development planning making use of participatory mapping with</td>
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<td></td>
<td></td>
<td>administration and communities (social maps, vision statements, problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>trees, etc.)</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Bangladesh Rural Advancement Committee (BRAC)</td>
<td>• School libraries and promotion of their use for developing literacy</td>
</tr>
<tr>
<td></td>
<td>Primary Schools</td>
<td></td>
</tr>
</tbody>
</table>


118 Table is adapted from Sinclair, 2012, ibid.
This evidence provides a compelling argument for introducing an approach that specifically targets the needs of the communities' education provision in the rural and remote areas. The creation of community demand is critical before the supply of the education infrastructure and other learning resources. Both demand and supply necessitate close participation on the part of the community. These selected examples of international education programs targeting rural and remote areas, demonstrate the potential for quality non-formal education approaches in helping to increase access, completion and achievement rates, in the most difficulty of rural, remote and isolated locations in a cost-effective way. The evidence indicates that less-qualified teachers when given appropriate training and professional support mechanisms with mentors, trainers and instructional resources, are often highly effective in supporting learning outcomes.

Community involvement is the key to success in these cases. The community participation is not sought after the school, teacher, curriculum and teaching resource are supplied by the government, but it is involved in the very early stage of discussing the role of education in improving the life of the community; school mapping and location; construction of the school building itself; determination of the language of instruction; the school timetable and scheduling to fit into the community needs; identification of the potential teacher (often from the community); contribution to teachers incentives (monetary or in kind, such as accommodation); and the curriculum and teaching approach itself, with the integration of local customs, folk-lore, games, indigenous knowledge and skills.

In short, this evidence indicates a compelling argument for introducing an approach to basic education provision in the rural and remote areas that specifically targets the needs of the communities in these areas. The creation of community demand is critical before the supply of the education infrastructure and other learning resources. The creation of both the demand for and supply of education will necessitate close participation on the part of the community.

The review of international experience of designing and implementing rural and remote education programs provides 7 Fundamental Principles which will be applied to developing the strategic plan for Tanah Papua, viz.:

**Pakistan** *(Balochistan)*  
**Balochistan Primary Education Development Project**

- Identify a female with grade 8 or Grade 10 qualifications as teacher
- Conducting a village survey
- Formation of a Village Education Committee (VEC)
- Transfer village land to government for school
- Train teacher
- Communities designs and builds school
- Female Mobile Teacher Training Units visit teachers in remote areas
- Teacher Resource Centers and mentoring by more experience teachers.
- Appropriate textbooks and teacher guides linked to local culture and in local language.

**Ghana** *(Rural Northern Region)*  
**Schools for Life**

- One class within a single community/village
- Flexible schedule to suit community calendar (harvesting, market days),
- Volunteer and community-based facilitators nominated and recruited by community
- “Soap money” given as a financial incentive
- Facilitator training (pre-and in-Service)
- Curriculum: local language, mathematics and life skills only integrated into each lesson.
- Use of traditional folk lore, songs, games, plays to make learning more personal and relevant.
- District Education Office assists with training and supervision.
- Community contributions: land, teachers, (facilitators) scheduling and monitoring.
- School committee selects language of instruction.
Box 6. Seven Fundamental Principles for Strategic Planning for Tanah Papua

1. **Build on existing initiatives and good practices in Papua.**
2. **Reach the underserved, remote and rural communities through non-traditional approaches.**
3. **Promote decentralized management through effective partnerships (with government, NGOs, and school or village-level education committees).**
4. **Use the local language for instruction in the early grades of schooling.**
5. **Engage communities in customizing schools to local context in order to increase demand.**
6. **Focus on learning outcomes, particularly literacy and numeracy, and proven teaching methods and monitor and evaluate to ensure learning outcomes are being met.**
7. **Recruit, train, support and supervise local indigenous teachers.**
Many local education programs demonstrate promising approaches aligning to these established principles. It is important that there is no one, single approach that could serve all the geographically and culturally diverse locations in the two provinces of Tanah Papua. The underlying principle of working with local communities to create demand for basic education and tailor its provision to local needs, wants and benefits, means that there will be different solutions.

A number of examples of good practice aligned closely to the principles outlined in the previous section were found in Tanah Papua and although these are not by any means the only innovative approaches that seem to work in the rural and remote areas of the provinces, they are worthy of review here.

12.1 Multigrade Teaching and Learning

12.1.1 Background to Multigrade

Multigrade classes, can be defined as those where one teacher has sole responsibility for two or more grades, or classes, of pupils at the same time. The term is broadly used to include combination classes, multiage classes, and family grouped classes. In the context of many developing countries, including Peru, Sri Lanka, Vietnam and Indonesia, the term ‘multigrade’ nearly always refers to classes where grades have been combined for reasons of necessity rather than pedagogical choice, making the term combination class a useful alternative to multigrade.

Multigrade learning and teaching is therefore a common practice in rural and remote schools throughout the world where the number of students is often low as well as the availability of qualified teachers. A very large proportion of primary level teachers in many different countries are teaching multi-grade classes. There are examples of multi-grade teaching in Finland (where 70% of all primary school pupils are enrolled in schools with fewer than three teachers), Portugal: (where 80% of pupils attend schools with no more than two classrooms), The Philippines (where 8% of schools are multi-grade, Mexico (where 22% of primary schools have only one teacher), India (where 77% of primary schools follow the multi-grade system), Ireland (where 42% of schools have two or ore grade levels and 16% have three or more in a class) as well as in the rural and remote areas of Australia, the UK and the USA. In developing countries, for example in Africa, multigrade teaching is found in primary schools in Botswana, Malawi, Uganda and Zambia, and it is also practiced in Belize, Dominica, Guyana, Jamaica, Trinidad and Tobago and in the Turks and Caicos Islands.

119 E. Hargreaves et al., Multigrade Teaching in Peru, Sri Lanka and Vietnam: an overview
121 Commonwealth Secretariat, A Multi-grade Teaching Programme, London, 2005
Unfortunately, instructional material are often unavailable for multigrade teaching, planning can be very time consuming and the physical conditions (having many different ages and learning levels in one room) is often perceived as detrimental to quality instruction by stakeholders and can be very frustrating for teachers who have not received adequate professional preparation and development in multigrade teaching. However, there is compelling evidence that with improvements to multigrade teaching and learning classroom strategies and developing appropriate learning materials, this can be a very effective way of teaching in RRAs.

Modules for early grade and multigrade teaching and learning as well as teacher development programs have been developed and implemented by the UNICEF Education Assistance to Papua and West Papua program. Field monitoring visits by UNICEF and provincial and district staff suggest evidence of improved classroom practice.

12.1.2 Multigrade Teaching in Pacitan

Pacitan District in East Java has had difficulties staffing the small schools in its rural and remote areas. Many have fewer than 60 students, but they are situated a long way from other schools, so merging the schools is impractical. The District has started experimenting with multigrade teaching by creating 36 multigrade schools, with support from the USAID MBE program.

First, a workshop was organized to introduce the idea of multigrade teaching and how to do it in practice. The participants learnt that multigrade learning is not about teaching two classes at once, but making a program for the whole class, with different activities to cater for different levels of ability. As such, it does not sacrifice educational quality. Teachers used a theme to develop activities, using competencies from two grade levels. The participants also learned three strategies that can be used in the multigrade classroom to differentiate activities and/or outputs. The participants tried these out and then chose one to incorporate into a lesson for practice in their own classrooms.

To help ensure success, the program engages education stakeholders at all levels, from teachers at schools to decision-makers at the district education office. Other districts are now learning multigrade teaching from Pacitan.

More information on multigrade teaching in Pacitan and other districts can be found at the MBE website: http://mbeproject.net.

12.2 SERASI

12.2.1 YASUMAT

A further example of local good practice is that designed and implemented by SERASI in the Highland communities in Yahukimo in Papua which works through the local yayasan. Here the problems of health, education and governance were found to be interrelated as were the solutions. SERASI through a grant to a local yayasan (Yayasan Sosial Untuk Masyarakat, or YASUMAT) worked in 21 sub-districts in Yahukimo to provide basic health and education service and capacity-building of parallel teachers and healthcare workers through community driven livelihood and village planning, ensuring the transparent management of village funds, development of local leadership capacity and provisions of communications technology to connect to remote areas. YASUMAT was often the sole provider of health and education services in these remote, rural highland areas because the regular teachers and healthcare workers were frequently absent from their posts. The program was acknowledged as successful by the local government and the work by the volunteers under YASUMAT was formalized by adding them to the district payroll.

122 See UNICEF Indonesia, Final Report, 28 February 2013, p. 41
123 For details see USAID/SERASI Program Final Report 2008-2013 prepared by International Relief and Development (IRD) for USAID which supported the SERASI program. See p.39f
124 VSAT technology is used for in-service teacher development and also used with satellite phones in the operation centres in the highlands. p.41
Both health workers and teachers received initial and refresher course training (previously not practiced in the highlands) and a contextualized Papuan Curriculum was introduced to teach primary school Mathematics and Bahasa Indonesia. V-SAT is being used for teacher development through practical simulations of teaching methodologies, lessons plans and student worksheets for these two subjects. YASUMAT staff has also been trained in human resources development, budgeting, financial accounting and monitoring, in order to work more efficiently.

One of the most important projects undertaken by YASUMAT has been the creation of community-driven project for participatory village planning process. The participants were selected from the community-at-large rather than among the clan elites.

12.2.2 Yayasan Kristen Wamena (YKW)

YKW through SERASI funding developed and evaluated a Papua-specific primary school Mathematics and Bahasa Indonesia curriculum to learn skills that were globally necessary in the local context. YKW found that MOEC primary school textbooks could not be understood by students who did not speak Bahasa Indonesia on entering primary school. YKW assessed local learning behaviours and the most common words used in the local languages (Dani or other languages) to teach these words through activities with which the children were familiar as well as using local symbols to teach number concepts. This Contextual Curriculum was disseminated to another 6 districts in the highlands and instructional materials were printed and distributed (including 249,640 textbooks) benefitting over 30,500 students and 710 teachers in 355 schools in these remote areas. A Training of Trainers (TOT) was conducted using 30 schools focusing on basic skills of facilitations for teachers as well as use of training kits, etc. The work of the yayasan was recognised by MOEC at the provincial and national level and 88% of the master trainers in the project became district trainers.

12.2.3 BELANTRA

BELANTRA in Sorong was also sponsored by SERASI to document and integrate existing oral stories and games into literacy exercises that were adopted in Learning Centers and disseminated to primary schools as part of a basic remedial literacy program synchronised with the KTSP of the national curriculum.

12.2.4 Op Anggen School

This school began a vision of quality education that was different from many existing models in the vicinity of Bokondini, an isolated area in the highlands of Papua. Because of the lack of local schools, parents who could afford it would send their children to private boarding schools in Sentani or further afield. In this way the children were separated from their families at an early age. Considering this to be harmful for the children's development over the long-term, SERASI supported the local Op Anggen School, improving the quality of their teaching, providing supplementary health education and expanding to satellite schools. Computers and promethean active boards were provides and professional development given to the teachers, using the contextual curriculum. Op Anggen also provides vocational and technical training programs (e.g. carpentry) for local youth. The medium of instruction is in Bahasa Indonesia and English. The V-SAT and computer terminals enable children to study Mathematics, literacy, geography and natural sciences while art classes are focus on the local cultures.

125
126 KTSP – Kurikulum Tingat Satuan Pendidikan or locally-adapted curriculum
Chapter 12 Promising Local Practice

12.3 IPPM - The Sekolah Kampung (Village School)

The Village School is an appropriate way to bring education services closer to remote villages in the Papua region. Village Schools for Early Childhood Development (Sekolah Kampung-Anak Usia Dini or SK-AUD) have been implemented by IPPM Institute of Community Development and Empowerment (Institut Pengembangan dan Pemberdayaan Masyarakat or IPPM) since 2007 with the grant from PcDP. SK-AUD was formed based on local development needs. In Sarmi District, community participation in education still needs to be widened, especially in remote villages. The participation rates for elementary, junior high school and senior high schools are 94.1%, 67.6% and SMA 24.2% respectively (BPS, 2009). Even though participation rate is high, not all the children complete their basic education. The completion rate is only 34.3% in Sarmi. As mentioned by the teachers of elementary schools, children who were not prepared to attend their elementary school were most likely to drop out of the school system. Attending a Play Group or Kindergarten (three to five years old children) is the ways to make the children go onto attend elementary school, but unfortunately, such schools are not available in remote villages in Papua.

With no intention to replace the formal schooling from the formal education provider, IPPM established three Village Schools in three villages (Betaf, Beneraf and Yamna) in Pantai Timur sub-district, Sarmi District and involved local stakeholders to support the implementation of village schools.

IPPM commenced the initiative with socialization and participatory planning together with the local stakeholders. The aim of conducting socialization and participatory planning was to get local stakeholders’ commitment in the implementation of such initiatives at village school and in achieving the common goal. After the participatory planning, IPPM recruited local facilitators to facilitate the teaching and learning process in village schools. The recruitment was a crucial step for ensuring sustainability of the village schools. Local facilitators can stay at their villages and continue the teaching and learning process at the village school even when IPPM does not work in their villages anymore. In recruiting the facilitators, it is not IPPM who choose the facilitator but the local community. To facilitate learning process, village schools do not need any professional teachers, but community members who are capable, have good interaction.

127 Lihat Sekolah Kampung; PAUD Alternatif untuk Pedesaan dan Daerah Terpencil. Online resource: Village School; Alternate Early Childhood Education in Remote Areas in Papuajuga ACDP berkonsultasi dengan John Rahail, Direktur IPPM Papua, Mei 2013.
skills with the children, and are favoured by the children. Their parents could be the best candidates for village school facilitator. Till now, IPPM has recruited 30 local facilitators for three school villages. After being recruited, the local facilitators were trained on practical teaching and learning aspects, especially teaching and learning for children.

The local community has provided their contribution for a school building. They used village development funds (Dana RESPEK) to build schools. They worked together to establish playing equipment and media using local materials. IPPM contributed books, paint, nails and other fabricated materials. The local community managed the activities at village schools. IPPM had a significant role in the formation of the steering committee and in capacity building for the local facilitators. The SK-AUD still continues involving all local stakeholders from the Education Office of Sarmi District, government of Pantai Timur sub-district and village government, church leaders, adat leaders and other community leaders. Till now, the SK-AUD has benefited 134 children of below five years, and the number may increase from time to time. The SK-AUD also has benefited the wider community, especially those who are involved as committee and managers of SK-AUD.

The learning and teaching take place three times a week, every Monday, Wednesday and Friday. The facilitators teach the children through playing to encourage them to learn. There are two groups: the Learning Group and the Playing Group. The Learning Group is divided into two groups: the beginners (aged 3-4 years) and the advanced (aged 5 years and above). The learning materials are printed materials (alphabet, numbers, posters, etc.); electronic materials (cassettes, tape recorders); non-reusable materials (paper, colouring pencils etc.); educational toys and media. To improve children’s motor and social skills, SK-AUD (Sekolah Kampung – Anak Usia Dini) provides playground equipment. Children use it once a week. IPPM is preparing to establish small libraries for children. Once a month, the SK-AUD facilitators provide additional food (milk and mungbeans) for the children. The key success factor of a village school is the support of local stakeholders for the implementation. Local government as well as the local parliament fully supports the village school. The village government allocated their funds for the operational cost of the village school. With intensive consultation with the local community, they are willing to actively participate in village schools. This will ease the transfer of knowledge and skills to the community as a way to sustain the schools.

All 134 children attending the village schools are now enrolled in elementary schools. Teachers in elementary schools said that the children from village schools were very good in class, and had made better progress. This shows that village schools are an appropriate model to encourage the children to go on to attend elementary schools.

The village schools program has been socialized (approach disseminated) to provincial and district governments. With the impressive impact on village schools, the provincial government is committed to replicate village schools in other areas in Papua.

In developing the concept development of the Sekolah Kampung (as a means for meeting the basic need for education in rural areas) IPPM has conducted an incremental process by using the following strategies and methods:

- Identification of local needs, values, wisdoms and potentials, including various supporting factors and obstacles.
- Joint planning with community at the traditional para-para.
- Strengthening local potentials in the form of training
- Village school assemblies that are administered by a local IPPM manager
  - Village schools, twice a week (Mondays and Thursdays) followed by community health service (posyandu) once a week (Saturdays) and Sunday schools.
  - The location for the assembly is adjusted according to the topic; it can take place inside or outside (traditional para-para, under a tree, on the river bank, or beach)
- Developing and strengthening networks
- Assisting and placing IPPM staff to live in villages.

128 See ACDP personal communication with John Rahail, Director of IPPM (Institute for Community Development and Empowerment, Papua)
12.3.1 The KAT Empowerment Approach

In the developing the concept of this village school, IPPM has developed an assistance approach by empowering and strengthening local potentials by using an integrated approach (social, economic and cultural). IPPM used this approach to facilitate the community and management of the village school using the assistance principle: “come, stay, learn and work together with the community.” This participatory and empowerment technique with local communities is a development of the practice of Participatory Rural Appraisal (PRA) used by NGOs, governments and multinational agencies to open up new ways in which policy can be influenced by listening to the voice of the those who are poor, weak, marginalized and excluded (see text box below).

PRA or such related techniques can be used by education providers to ensure that the education supply responds to community demand and to develop a sense of ownership of the community in the schools they themselves will create.

Box 7. Participatory Rural Appraisal (PRA)

“The more significant principles of Participatory Rural Appraisal (PRA) concern the behavior and attitudes of outsider facilitators, including not rushing, “handing over the stick,” and being self-critically aware. The power and popularity of PRA are partly explained by the unexpected analytical abilities of local people when catalyzed by relaxed rapport, and expressed through sequences of participatory and especially visual methods. Evidence to date shows high validity and reliability of information shared by local people through PRA compared with data from more traditional methods. Explanations include reversals and shifts of emphasis: from etic to emic, closed to open, individual to group, verbal to visual, and measuring to comparing; and from extracting information to empowering local analysts.”


The use of these techniques to empower and engage with local communities is critical in understanding the needs of indigenous communities in rural and remote areas in Tanah Papua. Understanding what the constraints are to education provision, tailoring such provision to community demand and the perception of the benefits that education can bring to the community’s welfare and development, is a critical component of the KAT Empowerment Approach used by IPPM in the process of developing the Sekolah Kampung. A policy option suggested in this Strategic Plan is for the government at provincial, district and sub-district levels to use such community participation approaches effectively in planning with local communities and this will have major implication on capacity development within the government education offices at all levels.

12.4 World Vision: Community Engagement, Transformational Development, and the Integration of Services

The work of World Vision in Indonesia focuses on children and with communities on long term development projects to improve the life and well-being of the children. Their approach is to integrate development, relief and advocacy in work to
maximize impact. WV promotes the well-being of children as the best indicator for good development, emphasizing maternal and child health. Since malnutrition rates are still very high in Indonesia and in response to the need to meet the Millennium Development Goals by 2015, there is a special focus on nutrition. Besides food security, projects also focus on the areas of water and sanitation, hygiene, maternal and child health, and HIV/AIDS prevention and education (particularly in Papua province where the prevalence rate is high in comparison to many other provinces in Indonesia). In addition, economic development and microfinance is considered crucial to ensure sustainability of these programs.

Education programs in rural and remote areas are therefore integrated with work in these other sectors. There is a lack of teachers and inappropriate teaching methodology and infrastructure. Projects therefore work with local government to address these issues, focusing on strengthening the management of the schools, and also how the community can be empowered to take responsibility for its own development and being a good partner to its school. The community can hold the school management and teachers accountable and ensure that quality education is a priority.

World Vision uses a version of PRA (see discussion on KAT Empowerment in section above). A key concept in PRA that is reviewed extensively in WV literature has been the degree of engagement between the NGO, government or multinational agencies and the community. The dialogue with the community in the PRA approach aims to empower the community to make their own decisions concerning services for the community, and less dependent on the decision of external agencies. This is captured in Figure 10 in which the level of community participation moves from the levels of manipulation and information about plans decided externally to a process of consultation, partnership and ultimately self-management of community services in which power resides in the community itself.

World Vision incorporates a concept of “transformational development” that is linked to the popular discourse on “dependency” that underpin recent changes away from implementation strategy of direct service provision (encouraging a “dependency culture” or “welfare dependency” on the government or donor providing the service) towards the facilitation of capacity building for sustainability. Transformational development is pursued through means of community empowerment, participation in and “ownership” of the development process. Community empowerment is seen as the ability of the community to act and change its circumstances:

130 For an interesting analysis of the understanding and application of “transformational Development in World Vision and other Faith Based Development Organisations (FBDOs), see the research paper by Hannah Lindiwe de Wiet “Understanding Transformational Development in World Vision in South Africa” International Institute of Social Studies, The Hagues, Netherlands, 2011.

131 Community empowerment is defined as the process whereby “the poor and disenfranchised men and women come to be critically aware of their socio-political and economic situation” Keisell and Mercer 2003: 293)
“We seek to facilitate an engagement between the poor and the affluent that opens both to transformation. We respect the poor as active participants, not passive recipients, in this relationship.”

In working with the community, WV emphasizes the need to build trust before working with a community, spending a period working and talking with the communities to build trust with religious, ethnic, government, and informal leaders. It recognizes that there can be a variety of ways people can participate in the development process and it employs a “participation ladder” to characterize the different levels from external control to self-management as “manipulation- information- consultation-partnership- to independent control.” Of particular interest is not only World Vision’s concept of transformational development (TD) involving community engagement but also the development indicators that measure the impact of TD, see Figure 11.

This framework is elaborated into specific indicators that represent the integration of services that are critical in the target communities in rural and remote areas: the integration of education, health, nutrition, food security, water and sanitation, hygiene, maternal and child health, HIV/AIDS prevention and education, and microfinance for improving income generation.

### 12.5 UNICEF Models for Rural and Remote Areas

UNICEF had identified two key areas for accelerating development of education in Tanah Papua: (i) Improving access and quality of education services and (ii) improving governance of public services.

Included in its “Action Plan for Acceleration of Development in Papua 2011-2014”, the UNICEF education strategy included a variety of strategies: establishing “excellent” or model schools, increasing primary and secondary school student dormitories and international schools in border areas; establishing vocational schools; procurement of contract teachers and supporting the certification of teachers; provision of school housing; and improvement of the quality of school principals.

UNICEF provides specific support to the Papuan government’s “Affirmative Education Policy” in supporting the provision of small schools at village level for rural children in Grades 1-3, “single-roof” schools that combine elementary and junior secondary aged children in the same school, and the provision of boarding

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132 See World Vision “Transformation Development Indicators: Supplementary Program Resources Guide Community Participation.

133 Ibid. World Vision p.3 “The diagram shows the TDI and how they are organised in terms of their focus on the lives of people. The framework is child-centered and demonstrates how the well-being of the child is shaped within the overall context of his/her family and the community”. For detailed indicators see same paper.

134 Ibid. World Vision. p. 2

135 Ibid, Knezevic, 2012. Improving governance involves “institutional capacity development to support provincial and district governments to better maximise the use of resources and achievement of results for children”.
facilities for children who need to live away from home because of the distance from the home from the existing school. This program support covers a range of approaches depending on geographical areas and needs: formal education mechanisms for urban, peri-urban, and rural areas; non-formal for rural and isolated areas, and informal for more isolated zones. Of particular interest here are two approaches which UNICEF has highlighted as being successful for rural and remote areas: the Pamong Strategy “for isolated areas” and the “Visiting Teacher Strategy.”

The Pamong Strategy136 or “visiting teacher model for rural and isolated areas” is an attempt to move learning to out-of-school children in rural and isolated areas by developing modularized instructional materials in combination with community involvement in teaching, tutoring, monitoring and the organisation of learning activities and materials. A school is established which functions as a hub or cluster center for satellite learning posts located in remote areas where it would not be feasible to establish schools. The core schools are used as ‘resource centers’ from which cluster mentors provide more intensive and regular support to satellite schools.

Part of this approach also requires the use of modular support materials for teachers, such as teacher handbooks, student workbooks focusing on literacy and numeracy, effective mentoring guidelines, and localised trainings.

The original PAMONG model proved ineffective in reaching rural teachers so the approach was revised in some limited examples to be more of a ‘visiting teacher model’. This included the uses of local principals and school supervisors. Criteria for selection included: whether they lived near the satellite schools; possessed adequate knowledge in multi-grade and early-grade teaching; and whether they are competent as skilled facilitators. Their main tasks included co-facilitating cluster level teacher trainings in core schools in rural areas, and mentoring satellite teachers under the guidance and direction of district trainers. Over 100 cluster mentors were effectively involved in programs implemented in selected schools in Mimika, Jayawijaya and Sorong, working to support multigrade and early-grade satellite schools.137

12.6 The Sokola Rimba (“Jungle School”)

As an educator and activist, Butet Manurung is famous for her book Sokola Rimba (Jungle School) about her experiences as a teacher in the NGO conservation group, WARSI, where she led their education program for the Orang Rimba, or “People of the Forest”, the indigenous peoples in the rainforest of Jambi, Sumatra.
Her work in the rainforest evolved into the co-founding of the NGO SOKOLA targeting marginalized people in remote areas throughout Indonesia. Many of the experiences related in the book relate to the principles of international “best practice” of the provision of quality education in rural and remote areas as well as those related above with SERASI and the Sekolah Kampung. The following issues are Butet’s reflection on the basic requirements for an Orang Rimba education program (“what works”) and they relate closely with what can be achieved in the rural and remote areas of Tanah Papua:

- **Lessons need to be tailored to the Orang Rimba daily activities**
  Education materials need to be relevant to their needs and way of life. The materials also need to be designed appropriately to take into account the comprehension levels of the children.

- **The Orang Rimba need to receive some benefit from any education program**
  It is important that the Orang Rimba themselves recognize the benefits of education. Any program seeking to redirect a certain community outlook would not succeed if the people it is seeking to help do not share the belief that change is beneficial to them. Thus any program benefits have to far exceed the negative spill over resulting in the acceptance of the change. It is also important that these benefits are maintained into the future and are open to revision if necessary.

- **The education process needs to be locally organized**
  The involvement of local people into the mix is likely to aid learning. Total integration by the teacher into the life of the Orang Rimba, with intermittent time outside the community, would contribute profound insights into any perception daps between the two worlds.

- **The education program needs to facilitate critical analytic skills and provide skills to assist the community in coping with the development challenges ahead.**
  There is a need for critical analytical skills to deal effectively with development and environmental changes. Development plans need to be explained in a transparent and honest way to each decision-maker and the inherent risks, which might affect their lives, need to be apparent.

- **The basic goal of any education program includes facilitating the Orang Rimba’s capacity for self-realization, providing a vision for the future and developing self-integrity within the Rimba community.**
  Education programs should be aimed towards preparing the Orang Rimba to fend off external pressure, thus enabling them to master their own future direction.\(^\text{138}\)

12.7 **Summer Institute of Linguistics (SIL International): Mapping of Language Communities and Schools**

SIL International-Indonesia is a non-profit organization having a consultative status with UNESCO; it fights to empower minority language community through research and literacy programs with a mission to assist the community in promoting their language, education and development by preserving the uniqueness of its culture and language. SIL Papua has been active in the construction of linguistic and school maps – an activity essential for the coordination and effective planning of social service provision and education in particular - in Papua. Whether this be infrastructure such as roads, villages, schools or other projects, the process of mapping and constructing accurate maps are crucial, particularly in Papua province where accurate maps are almost non-existent. Some of the extensive work conducted by SIL on working with local communities and mapping local languages in Tanah Papua has already been reviewed in Chapter 7. In this section, specific examples will be given of local language mapping at the district kabupaten level which has been usefully combined with the location of schools.

The SIL Language Maps define existing language boundaries not only in rural and remote locations but in Papua and West Papua. The languages in these provinces have been assessed by SIL through the following methods: (a) Lexical similarity comparisons between the speech varieties used between villages and with villages of the neighboring languages; (b) using interviews with community members regarding perceived degrees of similarity and intelligibility between the surveyed villages as well as the perceived degrees of similarity and intelligibility between each language and the surrounding languages; (c) interviews with community members of the surrounding languages regarding the perceived degrees of similarity and intelligibility between their language and the neighboring language. During these surveys, demographic data was also collected.

Language vitality maps were constructed in order to assess how close endangered Papuan languages are to the threat of extinction. This needs to be measured before any decisions on language choice in schools are made. UNESCO as well as SIL have pioneered much of the theory and methodology behind language vitality testing and the language vitality scale -- which could just as well be called the "language endangerment scale (see Chapter 7 for the language vitality scale used in these surveys).

Language vitality in this paper was investigated through the following methods: (a) reported language use in various domains, both public and private (home, school, church, sports etc.); (b) reported language use of the younger generation for intergenerational shift; (c) reported indicators of language maintenance.

Since language vitality overlaps with language attitudes, community attitudes to their language were also examined in the following ways: (a) reported attitudes toward the oral modality (b) reported attitudes toward the written modality of the language used in the local community, such as attitudes toward potential development of their traditional mother tongue to include written texts. Final results are tabulated in the maps presented in this paper.
In order to ensure high reliability and validity of the data, triangulation methodologies were used to evaluate if what was reported to the different researchers was also be observed in the community.

**Cartography Software**

The cartography software that supports SIL’s research is rated as one of the world’s best. ArcView GIS Version 10 covers the full range of geographic information systems (GIS). ArcView GIS is a high-end, full-featured geographic information system that supports the kind of scientific research characterized by this mapping project. Because of the professional geographic databases already available as extension through the ArcData Catalog, the cartographic basis from which all SIL maps are constructed are highly reliable.

**Limitations and Delimitations**

Data for school mapping provided to the government by an independent contractor proved to be so erroneous that the government has refused to use it (it located many schools in the ocean) or make it available to the SIL research team contributing towards this study. Further complications arose when the research team solicited village locations from the Department of Statistics, who provided data of village names that did not exist on the ground.

Additional complications arose from the government’s recent push to divide regencies into smaller and smaller units. This has resulted in a mapping back log by the government, with boundaries between regencies still not clearly defined. The domino effect is that school locations in these new regencies are also largely unavailable. As a result, only those elementary schools listed in the Department of Education’s database can be located on maps.

In order to move ahead, the research team therefore used its own extensive GPS language mapping database constructed by their on-the-ground survey team, while also working with helicopter, bush plane and missionary aviation airlines to further get accurate GPS coordinates of villages and towns. Local governments, and local language informants were also enlisted to provide first-hand information on names of villages and locations, to provide the best elementary school maps to date. A complete list of resources that were consulted is listed in Appendix I of the Report in Volume 2.

BGAN is a telecommunication tool used by SIL in producing the language and school maps. The device is a substitute for a Satellite Phone, and it is used by field workers, either by SIL or other counterparts, working in the remote areas of Papua. This instrument is a wireless device equipped with a phone facility and is used both to make phone calls and to send/receive emails. Since the satellite used for connectivity
purposes orbits above Papua New Guinea (PNG) the voice range is adequately clear for either sending/receiving data or for receiving calls.\textsuperscript{139}

School location maps are plotted on a regency basis and solely limited to regencies considered by the government to be below the UN Human Development Index. Schools are identified by name and the sponsoring agency (The Yayasan Agama Islam (YAPIS) supported by Muslims; Yayasan Pendidikan Advent supported by the Adventist Church; Yayasan Pendidikan Kristen, supported by the Gereja Kristen Indonesia; Yayasan Pendidikan dan Persekolahan Gereja-Gereja Injili, supported by five different Evangelical Protestant churches and the Yayasan Pendidikan dan Persekolahan Katolik (YPPK) supported by the Roman Catholic Church).

A snapshot of the Kabupaten Puncak Schooling Map is shown in (Map 6.) below. See also Table 12. for the status of school and language mapping conducted by SIL to date. As part of the Strategic Plan, it will be argued that mapping such as this will provide invaluable tools for planning and management purposes and that these activities should be mainstreamed into the activities of the local education office at province, district and sub-district levels.

Map 6. Kabupaten Puncak Jaya Schooling Map

\textsuperscript{139} The instrument is comparatively light and portable for mobile use and Rp 20,000,000 (approximately USD2,000) is affordable. (SIL, personal communications).
Table 12. Status of School and Language Mapping

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<th>Government</th>
<th>Church/NGO</th>
<th>Community Verification</th>
<th>Villages allocated</th>
<th>District Boundaries Clarified</th>
<th>Regency Boundaries Clarified</th>
<th>Elementary Schools Allocated</th>
<th>Village Languages Verified</th>
<th>Village Location</th>
<th>Elementary School Locations</th>
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</table>
Chapter 13
Strategic Options

Figure 12 encapsulates the various strategies that will be proposed for improving the education system in rural and remote areas of Tanah Papua. This strategy will have a number of components that are inextricable linked to and dependent on one another for their effectiveness and success. This can be further described graphically as a “spider’s web” in which each component is critical for the balance, integrity and stability of the overall architectural structure. All components in this strategy will be critical for the overall success of the education system in the targeted areas (see Figure 15).

The objective of the strategic directions presented in this document is to both empower and nurture community responsibility among rural and remote village level schools. The strategy gives communities the freedom to both contextualize the education for their communities as well as holding them accountable for ensuring its quality; it defines the place and role of the government as the supplier of services needed to make rural and remote education a success.

13.1 Policy Decisions for Rural and Isolated Communities

Empower and educate local communities to embrace the ownership and success of their village school. This can be done through a variation of a PRA technique (see Chapter 12 and the experiences of the KAT Empowerment Approach of the sekolah kampong). SIL has extensive experience of these techniques for
dialoguing with the communities and they could support the capacity development of kabupaten to conduct such participatory approaches). Village-level school boards could be instituted which formulate an agreement between the community and the Dinas Education Office. The agreements need to address the concerns of both the Dinas and the community (student attendance, teacher absenteeism, incentives, sanctions etc.). These boards will be directly accountable to the Regency office. Note that TNP2K\textsuperscript{140} has recently proposed a project for improving teacher accountability and performance in remote areas to possible include Tanah Papua; a key component of this proposed pilot project is to facilitate community based solutions to improve teacher accountability including a point of payment for teachers’ salaries. This would entail the engagement of communities in developing a “service agreement” between teachers and the community to develop better performance and accountability. This concept is closely related to the community compact suggested in this strategic plan: the community would be engaged on issues of the benefits of education for the community, the identification of a local language to serve as the language of instruction for the early grades, identification of a community teacher, provision of an initial school and support for culturally relevant learning resources, appropriate incentives and sanctions related to teacher performance, etc.

13.2 Select an Appropriate and Effective Mother Tongue Based Multilingual Education (MTB-MLE) Model

(i) The policy option presented in this Strategy is to follow the model of Papua New Guinea and the Philippines and institute Mother Tongue Based Multilingual Education (MTB-MLE) for isolated monolingual communities for the first three grades of school. MTB-MLE needs to bridge to Bahasa Indonesian after basic literacy has been attained in the mother tongue. A Study Visit by relevant staff of the districts and sub-district offices to PNG and/or the Philippines would be valuable in reviewing their language programs.

(ii) As part of this policy option, an Institute or Language and Culture Division within the Department of Education, Culture and Sports (DIKPORA) would be established devoted to (a) developing Mother Tongue Based Multilingual Education for rural and remote communities who choose MTB-MLE and (b) train and work with the village level school boards to strengthen local leadership capacity and engage with the communities on issues of language and schooling.

(iii) The newly formed DIKPORA Language and Culture Division would educate and train the above mentioned village-level school boards to make informed decisions regarding the role of mother tongue education for the first three grades of schooling. If the community chooses to embrace Mother Tongue Based Multilingual Education (Mother tongue and Indonesian), have the Language and Culture Division work with the local community (and other language/education NGOs) to develop the needed curriculum.

(iv) A third grade reading/writing/arithmetic assessment tool would be instituted that can be easily adapted for Papuan minority languages. This assessment would not necessarily be conducted at one time but could span three stages as shown below in the table below,\textsuperscript{141} including emerging literacy, basic decoding (letter/sounds), and reading fluency with comprehension by the end of grade 3. This tool is meant to be an early warning system to measure that national academic benchmarks for the third grade are being met through MTB-MLE. This is critical if the specific focus on education in rural and remote areas is not to be seen as a deficit model of education provided in urban or peri-urban areas. The compelling case for instruction in the mother tongue is that children will learn better; not only in the early grades to develop literacy and numeracy but also in later grade when they have transitioned into Bahasa Indonesia. The close monitoring and evaluation through low-stress and “low-stakes” student learning assessments will be critical in this regard. A modification of the USAID-supported EGRA (Early Grade Reading Assessment) and EGMA for measuring individual skills in mathematics/numeracy\textsuperscript{142} would be developed in the languages of instruction for this purpose.

\textsuperscript{140} TNP2K: Tim Nasional Percepatan Penanggulangan Kemiskinan or the National Team for Accelerating Poverty Reduction (TNP2K) in the Vice President's office

\textsuperscript{141} See A. Gove and P. Cvelich, 2010. Early Reading: Igniting Education for All: A Report by the Early Grade Learning Community of Practice Research Triangle Institute, NC, p.18.

\textsuperscript{142} Early Grade Reading Assessment (EGRA) was developed by RTI (Research Triangle Institute) with support from USAID and World Bank,
The reading skills measured by early grade reading assessments focus on three early stages of reading acquisition. Although the rate at which children pass through these phases varies by country and language, the following provides rough guidance for when most children should acquire these skills:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Test Components*</th>
</tr>
</thead>
</table>
| **Stage 0: Emergent Literacy** Birth to grade 1 | • Concepts about print  
• Phonemic awareness  
• Listening comprehension |
| **Stage 1: Decoding** Beginning grade 1    | • Letter naming  
• Letter sounds  
• Syllable naming  
• Nonsense word reading  
• Familiar word reading |
| **Stage 2: Confirmation and Fluency** End of grade 1 to end of grade 3 | • Paragraph reading (oral reading fluency) with comprehension  
• Dictation |

* Not all components are tested in all languages. Sources: RTI, 2009; Roskos et al., 2009.

(v) Work with SIL Indonesia and Yayasan Abdi Nusantara to map languages, language vitality and school locations in the province. This is to support educational administrators in tracking appropriate school curricular needs, language concerns, student/teacher attendance, location of schools, etc.

(vi) Establish the responsibility of the kabupaten in which most of the rural and remote communities reside (Deiyai, Yahukimo, Pegunungan Bintang, Intan Jaya, Membramo, Nduga, Lanny Jaya, Yalimo and Puncak) identify to the newly formed DIKPORA Language and Culture Division where they would like to initiate implementation of the community-based school boards and mother tongue based multilingual education strategy.

### 13.3 KPG Reform

Ensure that the Kolese Pendidikan Guru (KPG) in Nabire, Merauke, Mimika (in Papua) and Sarong (in West Papua) return to their original vision: training teachers for remote and rural schools. Ensure the KPG work with UNCEN not just to conform to an appropriate UNCEN curriculum but also develop their own unique curriculum that puts Papuan rural and remote students first. Courses in Second Language Acquisition, Multilingual Education, and Anthropology of Remote Papuan Peoples should be included and take center stage in the curriculum to prepare teachers for teaching in these indigenous, rural and remote areas. This could be initiated by the collaboration of faculty from the departments of Education, Letters and Anthropology.

Revisit the mission and vision statement of the school. It should clearly spell out that the KPG is meant to train quality elementary school teachers for the unique Papuan context. Any assistance from UNCEN should fall into this broader mission. Revisit the curriculum used in the KPG to ensure it is driven by educational needs experienced by rural and remote Papuan school teachers. Avoid adopting a generic curriculum but make it “khas Papua” (especially Papuan).

The majority of the students in the KPGs are non-Papuan, so ensure a 3 credit Language and Culture Acquisition class is included in the curriculum so non-Papuan students going to remote locations have the tools to both learn the language and culture of the community in which they are placed. Since many of the
graduating teachers will be teaching in villages where students will not be fluent in Indonesian, include a class in Multilingual Education.

Restructure the KPG dormitory so that it has a “Papuan Family Feel.” A screening process should be developed to screen potential Papuan couples who would work as dorm parents. Provide initial training to the dorm parents on parenting and on the issues and concerns faced by secondary school students. The dorm should ideally include a husband and wife (and/or children) from Papuan descent. They should be encouraged to approach the secondary school students under their care in the same nurturing manner that they would approach their own children. Ensure food selections include a good amount of “Papuan favorites.”

Hire more Papuan faculty to address the current imbalance between Papuan and non-Papuan staff and provide “Faculty in-Service Training on Papuan culture” for all faculty.

**Add one KPG in Wamena (or expand the existing Teacher Training College supported by YKW).** Wamena is the highland transportation hub for most of the isolated and rural communities and expanding teacher training in this location will ensure greater cultural compatibility between the KPG institutional culture and the Papuan students who will be teaching in highlands. Presently the KPG in Nabire, Mimika and Merauke are all located in transmigrant locations and are staffed by a majority of non-Papuans and their student bodies are made up of a majority of non-Papuans.

**Multi-Subject Teaching for Teachers**

Teachers should also be trained in a dual subject specialization (a major as well as a minor subject). The national government is currently implementing new policies to reform teacher training. These include (i) imposing quotas for the number of students who can enter teacher training institutes (responding to the overall surplus number of teachers, the extremely low student-teacher ratio (STR 16:1 (SD) and 13:1 (SMP) but inequitable distribution, especially to RRA where there is a drastic shortage), (ii) improving student selection; (iii) providing scholarships for students taking up the teaching profession; and (iv) introducing a system of multi-subject teaching.

The latter is a response to the large number of teachers unable to meet the teaching load requirement (24 hours a week). It is recognized that school staffing formulae and policies relating to teaching subjects need to fit the realities since, if a teacher does not meet the required teaching load, he/she will not receive a professional allowance. A system of dual subject specialization will now be introduced whereby a teacher will qualify prepared to teach one major and one minor subject.

**13.4 Review of ICT Use and Potential**

Conduct an intensive evaluation of the effectiveness of the various programs for connecting rural and isolated communities, schools and learning centers, to modern communication grids, whether for telecommunications or Internet. The pilot in Keerom should be reviewed as part of this evaluation and progress should be reviewed on the ICT Strategy for Papua that has been supported by the World Bank (see Chapter 9). It is important to recognize that it is not only important that populations in these difficult to reach areas are not excluded from the “Information Society”, they are the ones that stand to benefit the most from access to and use of ICT connectivity to ensure that service delivery in sectors such as education, health, and other sector reach the most in need. These technologies have a potentially a powerful role to play in the delivery of development services and their quality improvement at all levels of the education provision from the provincial, regional and sub-regional levels, down to use in distance education for teacher development and upgrading, to use in the schools themselves.

Encourage UNCEN or (UT) Universitas Terbuka/The Open University, to launch an education major in Rural and Remote Education that supports the career path of rural and remote teachers. Offer the courses in

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143 ACDP Country Background Report, 2012 p. 110
144 For details see ACDP, Country Background Report, p.129f
this new major in modular format during the summer vacation at the KPG. Have the institutions offering these courses institute a policy that instructors teaching in these classes obtain first-hand experience teaching in rural and remote locations. Ensure the curriculum includes classes in Rural and Remote Papuan Anthropology, Multilingual Education, Second Language Acquisition and Applied Linguistics.

**Although GIS technology, holds much promise in being able to integrate so many factors in a decision making model, it does not preclude the need to gather data; it is not a “silver bullet” or magic solution for the need for accurate data and a review of how manual, GIS and other ICT systems can be integrated for planning purposes would be part of the ICT Evaluation** (see SIL’s telecommunication tool, BGAN, for producing the language and school maps).

ICT and GIS\(^{145}\) systems in particular, have also a very specific value for facilitating the mapping of communities and languages. Information on remote and isolated schools and communities without schools is unreliable, especially in Papua, and there needs to be a comprehensive effort to integrate the current state of knowledge to get a multi-dimensional picture (e.g. location of schools by language and ethnicity or tribe). Simply creating an inventory of schools is insufficient to ensure the provision of education services in the remote and isolated area. Data such as teacher and principal qualifications, attendance rates, net enrollments, grade repetition, school dropouts, etc., must also be included in the school mapping research. Additionally, the relevance of the curriculum to the local culture and the language of instruction is related to the quality of education and has consequences for student learning, retention, and transfer rates to junior secondary school. Therefore, language and culture of the community and the educators would be included in this system. While geographic designation assists in distinguishing the challenges faced by certain schools, their location does not ensure that issues such as availability of transportation, the cost of transportation, communication systems, and availability of electricity are adequately considered when classifying a school. Such nuanced designations are essential for planning, and for improving teacher attendance.

### 13.5 Development of Models of Rural-Remote Community School

Underpinning all the others drivers in this Strategy is the focus on the provision of an innovative, more relevant and culturally appropriate approach to the provision of basic education in rural and remote areas of Tanah Papua. We have looked at international experiences from countries such as Laos PDR, Cambodia, Bangladesh and China, as well as “good practice” from Tanah Papua itself. The blending of formal, non-formal and informal approaches to schooling has provided new models of schools such as the sekolah kampong provides a different approach to the boarding school model of the “Affirmative Education” model. The thrust of this Strategy is that there is –and should not be – a single solution or model school. At the center of the Strategy is the need to work closely with the diverse cultural, linguistic and ethnic communities throughout the rural/remote areas. Engaging in the communities will ensure that education provision (the supply) will respond to the needs, wants and benefits of these diverse communities (the demand). Aligning closely with the 7 Principles outlined in Chapter 17 will yield different models of school but will ensure that the schooling responds to the demand of the community. In this way, the current situation in many districts where government schools are not in use; teachers and principals - and consequently their students - are frequently absent; the language of instruction is not comprehended well; the curriculum seems irrelevant to the culture and development needs of the community; the teacher does not feel part of the community and has an inappropriate and irrelevant preparation, training and support; will become a thing of the past.

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\(^{145}\) A Geographic Information system (GIS) is a computer-based system of storing, analyzing and displaying multiple sources of social data and displaying it on multi-dimensional maps. While the integration of social data is not new to policy analysis and planning, the ability to display the information in easy to comprehend pictorial graphs or maps is an advancement made possible by digital technology, particularly cartography, statistical analysis, and database technology. Most importantly, GIS technology advances evidence-based decision making at all levels.
13.5.1 Determining Minimum Service Standards (MSS) for Rural and Remote Schools

A further policy option to determine minimum service standards for the schools situated in rural and remote areas. There is sufficient regulatory framework for reviewing MSS standards for RRA schools, starting with the Presidential Decree 65 (Peraturan Presiden UP4B) to “Accelerate the Development in Papua and West Papua” that opened up local legislation to address the needs of indigenous populations in Tanah Papua (“in the highland or small islands, coastal areas or ‘lagging areas’ as well as urban and ‘strategic areas’ (see Chapter 3 The Target Zone: Rural and Remote Areas). The Perdasus issued by the Provincial Government and Parliament (DPRP) on the education services for indigenous Papuans (Komunitas Adat Terpencil or KAT) asserts an “affirmative policy” covering education provision covering among other key elements school infrastructure and facilities, accreditation, quality assurance, supervision, community participation and financing. This recent regulatory framework therefore opens the possibility of a review of the MSS for RRA schools in Tanah Papua.

The national MSS for basic education were first articulated in Ministerial Regulation 15 of 2010. They were an attempt to set a lower level than the existing National Education Standards (NES), which with their 700 or more indicators (in 8 categories/standards), provided a high standard for schools that were in many ways unrealistic at the time. Although related to the categories and indicators of the NES, the MSS indicators were an attempt to set lower levels standards than the NES as part of a pro-poor policy that were more realistic as well as “simple, concrete, easy to measure, transparent, and justified as being set at a level which can be achieved step by step”. It would ensure that schools serving a small number of children and that are less resourced and developed meet minimum standards to enable them to meet the minimum conditions of learning. The MSS offers therefore a “benchmark or standard for the performance of basic education services delivered through the formal education system administered by districts/cities” consisting of 27 items covering indicators relating to:

- Government and private primary schools and madrasah (SD/MI);
- Government and private Junior secondary schools and madrasah (SMP/MT); and
- Local education authorities at the level of districts/cities, including education departments (MOEC) and the equivalent offices of the Ministry of Religious Affairs (MORA).

Fourteen of the items are the responsibility of the local education authorities and the remaining 13, relating to schools, are the responsibility of government education authorities to ensure the school buildings have appropriate building and equipment. The revised legislation also recast the objective of MSS into the language of a “right” – basic education MSS outlines “the required kind and quality of basic services which districts/cities are obliged to provide and which every citizen has a right to receive as a minimal level of service delivery”.

The current MSS are available at two levels: for every school (involving 13 standards related to facilities, teachers, curriculum, assessment, quality assurance, and school management) and for each district (14 standards covering facilities, teachers, curriculum, and quality assurance) as a first step to achieving the NES for basic education, covering primary and junior secondary schools.

According to Article 3 of Ministerial Decree 15/2010 on MSS, an exception to the national MSS standard exists for certain types of education service that are located outside of the formal provision referred to in the Article 2. This special provision refers to certain districts/cities in which it is mandatory to provide a type of education service according to the special needs, characteristics, and regional potentials. This would clearly include schools in rural and remote areas such as in Tanah Papua which will need to serve the very specific cultural, linguistic and developmental demands of the poorest, indigenous communities.
Figure 14 shows how such a system might work. The introduction of a “Threshold Level” for schools in rural and remote areas would act as a transitional accreditation (from non-accreditation to MSS level) during which time the schools would have a 2-year period to demonstrate that they are operating at the required level to receive increased government financial support to take them to MSS level. Suitable indicators of performance would be that the school has “adequate” facilities provided and monitored by the community: existence of a functioning school management board, water supply, security, good principal, teacher and student attendance, mother-tongue instruction, contextualized curriculum150 and pedagogy, incorporating local folklore/stories, customs, adequate nutrition in the form of school meals, the school serving as a centre for integrated services for the community (“transformational development”, etc. The creation of relevant standards for these schools in rural and remote areas would not constitute a “lowering of the bar” (inferior standards) compared with the national NSE/MSS/BAN Accreditation system, but would rather mean the introduction of a more relevant system of standards for these schools and, at the same time, would act as an incentive for communities to initiate the learning process themselves according to their demand for schooling, before the government provides increased support in the form of more permanent infrastructure and facilities. This would ensure that supply is responding to demand.

150 The term “contextualized curriculum” was recognized as the need for each school to adapt the curriculum according to local needs (geographic, cultural, religious, developmental) under the school-based curriculum (KTSP) of Curriculum 2004. The status of KTSP within the new Curriculum 2013 is uncertain at this stage. However, this does not relate necessarily to the provision of education in remote and rural areas where non-formal school approaches are employed.

A good example of the way schools can relate learning across the curriculum to the differing local context is to be found in the work relating to the National Policy Review, formulation of a National Action Plan, and production of a Teachers’ Handbook and sample materials currently being produced in the Formulation of a National Plan for Environmental Education Program (ACDP 010). This involves consultations with different provincial and district governments, CSOs and local communities to adapt the curriculum on EE to the environmental conditions of each region.
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Box 8. Brief Guidelines for Criteria for Threshold Level Standards for Rural and Remote School

**Brief Guidelines for Criteria for Threshold Level Standards for Rural and Remote Schools**

Recognized Community schools would have a 2-year period in which to reach a satisfactory standard based on these criteria, after which the school is eligible for increased government funding to raise it to national MSS level. External support (see IV below) is necessary for facilitating the community activities during this process.

Evidence of will be required of:

I. **Establishment**
   - Official recognition of the school as a “community school” by the District Education Office;
   - A consultation, partnership and empowerment process with the local community on the need and provision of schooling and selection of the mother-tongue for early grade instruction;
   - Community agreement for provision of land and suitable infrastructure and facilities for schools (including play/sports facilities);
   - The formation of a School Management Council (SMC) to manage the school, select teachers/principal/facilitators, a community campaign to enroll and retain children in school, and to encourage youth and adult learning (literacy, numeracy and other essential life skills);
   - The provision of adequate community services such as health, nutrition, parenting, water and sanitation, HIV/AIDs prevention, etc.

II. **Learning Process**
   - Instructional materials developed according to mother-tongue based, multi-lingual education approach incorporating local knowledge and skills in form of customs, folklore, stories, etc. in content and methodology;
   - Mother tongue used as language of instruction in first 3 Grades, with Bahasa Indonesia (BI) as a second language, bridging to BI as language of instruction in Grade 4 and above;
   - Effective literacy and numeracy instruction is given priority in early grades;

III. **Monitoring and Assessment**
   - SMC monitoring system to ensure at least 90% attendance of teachers/principal in school;
   - Standardized assessments are given to measure student achievement in literacy and numeracy;
   - A range of community indicators (integrated services) are assessed against “transformational Development indicators” (such as those used by World Vision).

IV. **External Support**
   - Contract with external support agency (e.g. yayasan, government) to provide appropriate teaching staff, training, instructional materials and other facilities.

13.6 Governance – Capacity Development

Reforms of this extensive and complex nature will need to be accompanied by significant capacity development programs to improve current governance within the decentralized system. In this regards, governance applies not only to the education office from province to district, sub-district to school level, but also the wider system involved in the governing process relating to decisions impacting on the implementation of education policies and strategies, defining expectations, granting authority and power, and assuring accountability and quality performance. Committed leadership is necessary to ensure that such an extended governance mechanism pursue these reforms effectively and efficiently.

Attempts are ongoing in Tanah Papua to strengthen government education service delivery. UNICEF, for example, partners the governments of both provinces in the provision of technical support and training in the area of equity-based planning using a rights-based approach, improving budgeting and financial management in line with an equity focus and to improve government accountability. At the school level, ongoing programs supported by UNICEF, AusAID and USAID (DBE) for example, strengthen the school leadership and management skills of school principals, school supervisors, school committees, parents,
the community-at-large in monitoring school planning and supporting students learning both inside and outside school.

The newly-elected Governor of Papua has recently announced two significant policies that will impact on the governance and equity issues that will need to be addressed in the strategic planning process.

First is the increased allocation of Special Autonomy funds (Otsus) to the districts: from the current situation of 60% for district and 40% for provincial level, to 80% for districts and 20% for provinces. Of the budget of 80% allocated to the districts, the amount used for education will be at the discretion of the district office (allocated according to need). Through this policy, the intention is to accelerate service provision at district level.

Second, 5% of the 80% transferred to the districts will be earmarked for education services provided through the religious foundations (yayasan). This, if used effectively, has the potential to address many of the funding constraints facing the yayasan (see Section 3.3).

Specifically, this Strategic Plan has recommended:
(i) The establishment of a Division of Language and Culture in the Provincial Office for Education, Youth and Sports (Dikpora) and at the District level, focusing on education in indigenous communities and in rural and remote areas; language mapping, planning and instructional materials; and use of techniques for community engagement (KAT Empowerment/PRA);
(ii) Capacity development of governance structures at Provincial, District and Sub-district Dinas for planning/mapping, budgeting and management (supervision), with a special focus on equity issues to ensure that the children of the poorest populations have access to basic education with support from available scholarships for the poor and subsidies such as BOS and BSM, and Conditional Cash Transfers (CCTs) targeting the poor in these rural and remote areas;
(iii) The strengthening of relationships between government and the Educational NGOs (Yayasan). This would involve addressing accountability structures applied to teachers classified as civil servants (guru PNS) but who work in Yayasan supported schools. Also, to ensure that the government structures supervise and give feedback to the yayasan on performance as well as addressing the other major weaknesses and threats identified in the SWOT analysis of the five main yayasan (see 3.3 Education Foundations (Yayasan)).

Box 9. Implementing the Proposed Strategies

The proposed strategies in this Strategic Plan will need to be carefully costed, budgeted, managed within, for example, the decision making regarding the financing through the various sources such as provincial and district budgets and the Special Autonomy Funds (Otsus). The focus on mapping communities and language groups in rural and remote areas, working with communities to listen to their needs and develop their demand for a type of education model that is tailored to their needs, will require a major paradigm shift for a governance structure that has until now been predominantly focused on supply issues, particularly those of infrastructure.

Budgets will have to reflect a move away from buildings to training educational personnel to interact more effectively with communities in the rural and remote areas, and in working with such communities to find local solutions in a “community compact” involving language selection, type of schooling that would be culturally acceptable, development of instructional materials, reform of the teacher training programs, use of ICT, etc. Such a shift will involve not only the MOEC Dinas and MORA representative offices, but also Ministry of Finance, Ministry of Home Affairs, Bappeda, Ministry of Health, and the the Office for Empowering Indigenous Community (Dinas Pemberdayaan Masyarakat Kampung) and LPMP, among others.

The Strategic Plan has stressed the crucial principle of starting with an effective dialogue with the communities in the target areas in rural and remote location of Tanah Papua. The need to ensure that education service provision responds to community demand is at the heart of this Strategy. This has implication for both the demand and supply sides of both government and the communities that it serves. Figure 14 shows how the roles of government and communities could be aligned in implementing
such a strategy. The government will have demands such as in meeting national education standards or in meeting the labour market and skills demands for economic development plans such as MP3EI for the region, while the indigenous communities will have their own unique demands for education related to their perception of the benefits (or sometimes cultural threats) that learning will bring to the community. These demands will need to be sensitively discussed through the community engagement approaches discussed in this document. Similarly, on the supply-side the community can give money or in-kind contributions to the community school, monitoring and providing incentives for teacher performance, as well as participating in the school curriculum by providing local knowledge in the form of folk-lore, customs and, above all, the local mother tongue language for early grade instruction. The government, through its education budget can provide teachers and teacher professional development, adequate infrastructure and facilities such as instructional materials and teaching aids. According to the proposed “Threshold Level” mentioned above, the community with help from the government or the yayasan or other NGO or agency would have a 2-year period to ensure that a standard is maintained in order to attract further government investment to bring the school up to the MSS level.

It is important to note that the demand-supply relationship is in fact complex. Communities can often demand education for their children only to become quickly disillusioned when the supply is inadequate (the curriculum is not culturally relevant, teacher performance is poor, infrastructure and facilities are inadequate, etc) resulting in poor student participation, dropout and repetition rates, eventually resulting in a weakening of the initial demand.

Global practices on governance reforms promoting decentralization as a method of improving educational services identify a range of strategies related to planning, budgeting, transparency and accountability, and school autonomy. While much of the training that has been conducted has been beneficial for improving individual performance, it is less satisfactory as a strategy for systemic change, and to accelerate education development will require a systemic change.

There is an urgent need to foster a climate of innovation and change in education, building on local innovation and ownership. Building the capacity of personnel at district and sub-district levels in the rural and remote areas will need to assume priority for the provincial education offices. Such training will need to be different from that of their counterparts in other districts. Sensitivity and respect for the

151 MP3EI or the Government’s Master Plan for Acceleration and Expansion of Indonesia Economic Development 2011-2025.
culture, languages and needs of these communities will be critical for the success of providing an effective, equitable, quality and efficient basic education system.

Figure 15 attempts to integrate the various strategies that have been proposed in this paper building upon the distinction between the demands and supply sides of the strategic perspectives:

Figure 18. Strategy for Rural and Remote Education in Tanah Papua
Chapter 13 Strategic Options


Ilboudo P.T and Nikièma, N. (2011). Implementing a multilingual model of education in


Voorhoeve, C.L. 1975. Languages of Irian Jaya: Checklist Preliminary Classification, Language Maps, Wordlists


Annex A.  Laws and Decrees Regarding Education in Rural and Remote Areas

Policies and Draft Policies that Support Acceleration of Education Development in Rural and Remote Areas in Tanah Papua

A. National Policy

A.1 Republic of Indonesia 1945 Constitution

Chapter XA: Human Rights, Article 28I Line (3)
The cultural identities and rights of traditional communities shall be respected in accordance with the development of times and civilisations.

Chapter XIII Education and Culture, Article 31 Line (2)
Every citizen has the obligation to undertake basic education, and the government has the obligation to fund this.

Article 32 (2) The state shall respect and preserve local languages as national cultural treasures.

A.2 Law 21 of 2001 on Special Autonomy for Papua Province

Chapter XVI Education and Culture

Article 56 Line:
(1) The provincial government is responsible for delivering education at all levels, streams and types in the Papua province.
(2) The government shall establish a general policy on autonomy for higher education institutions, core curriculum, and standard quality for all levels, streams and types of education as a guideline for implementation for leaders of higher education institution and the provincial government.
(3) Every citizen of the Papua province is entitled to receive quality education as referred to in line (1) up to the secondary level, while putting the least burden on the community.
(4) In developing and delivering education, the provincial and district governments shall provide the widest opportunity to religious institutions, non government organizations and the public sector that meet requirements according to the laws and regulations to develop and deliver quality education in the Papua province.
(5) The provincial and district governments may provide assistance and/or subsidy to education units that are organized by the community in need.

Article 57 Line:
(1) The provincial government is obligated to protect, guide and develop the indigenous culture of Papua.
(2) In undertaking the obligations as referred to in line (1), the provincial government shall give the widest roles to community, including non government organization that meet requirements.
(3) Implementing the obligations as referred to in line (2) shall be accompanied by funding.
(4) Further stipulation as referred to in lines (2) and (3) shall be established under the Provincial Special Regulation or Perdasi.

Article 58 Line:
(1) The provincial government is obligated to guide, develop and preserve the diverse regional languages and literatures in order to maintain and strengthen the identity of Papuans.
(2) Other than Bahasa Indonesia as the national language, English can be established as the second language at all education levels.
(3) Regional language may be used as the language of instruction at the basic education level as needed.
A.3 Law 20 of 2003 on National Education System

Article 1 Point 16 Community based education refers to delivering education according to the uniqueness of religion, social, culture, aspiration and potential of the community as a way to create education from, by, and for the community.

Article 4 Line (5) Education is delivered by developing the culture of reading, writing and counting for all of society.

Article 8 The community is entitled to play a role in the planning, delivery, supervision and evaluation of education program.

Article 31 Line:
(1) Long distance learning may be carried out in all streams, levels and types of education.
(2) Long distance learning has the function to provide education service to society groups, who are unable to attend in face-to-face or regular classes.

Article 32 Line (2) Special education service is a education dedicated for students living in remote or lagging areas, remote traditional communities, and/or have suffered natural disaster, social disaster, and poor.

Article 54 Line:
(1) The role of the society in education covers participation by individuals, family, professional organization, business people and community organizations in terms of delivering and maintaining the quality of education service.
(2) Community may play a role as the source for, implementor of and users of education results.

Article 55 Line:
(1) Community is entitled to deliver community based education, both formal and non formal, according to the uniqueness of religion, social environment, and culture in view of the community’s interest.
(2) Implementers of community based education shall develop and carry out education curriculum and evaluation, and the management and financing thereof shall be according to the national education standards.
(3) The funds to to deliver community based education may originate from organizers, community, government, regional government and/or other sources that are not against the prevailing laws and regulations.

B. Draft Special Regional Regulation (Perdasus) 2012 on Education for Remote Traditional Community

Considering that:
a. In order to address the fundamental issue in the education sector as faced by the indigenous Papuans, both as individuals and communities, it is deemed necessary to have an affirmative action that is right on target, thus indigenous Papuans experiencing education issues may have a decent opportunity to become intelligent and dignified Indonesians;

GENERAL PROVISIONS

Article 1
In this Special Regional Regulation:
6. Remote Traditional Community or Komunitas Adat Terpencil, which hereinafter shall be abbreviated as KAT, refers to a group of indigenous Papuans living in areas that are difficult to access, either by communication, transportation, or facilities and infrastructure.
**Provincial Government**

**Article 2**
The provincial government is authorized to:
- a. regulate, guide and supervise the delivery of formal and non-formal basic education for KAT;
- b. regulate, deliver, guide and supervise the delivery of education in KPG;
- c. establish the minimum service standard in delivering formal and non-formal basic education for KAT;
- d. establish the minimum service standard in delivering education in KPG or Community Colleges; and
- e. establish the quota for enrolling KPG candidate students.

**Article 3**
The provincial government is obligated to:
- a. provide guidance in the delivery of formal and non-formal education for KAT in order to ensure qualified graduates;
- b. facilitate the delivery of formal and non-formal education for KAT by providing professional teachers according to the needs, development of science and technology;
- c. facilitate the delivery of education in KPG or community college according to the needs, development of science and technology;
- d. ensure the availability of teachers in KPG;
- e. ensure the availability of teachers for formal and non-formal education for KAT;
- f. facilitate the availability of facilities and infrastructure for the development of science and technology in order to support the delivery of quality education;
- g. develop cooperation between higher education institutions in view of improving the development of quality and quantity of education delivery;
- h. develop innovation, motivate, stimulate and facilitate the creation of a conducive environment that would result in delivering quality education and quality graduates;
- i. provide assistance in ensuring the availability of consultants for teaching and teaching materials; and
- j. encourage the business/industry sector to actively participate in a constructive manner in the delivery and improvement of education quality.

**Article 10 Line:**
(1) Indigenous Papuans, who lives in the local traditional community, are prioritized to become teachers in Small SD.
(2) Should there be no indigenous Papuan teacher available as referred to in line (1), the district government shall recruit a non indigenous Papuan teacher.

**Article 11 Line:**
(1) Indigenous Papuans, who have experience in teaching Small SD and have completed their S1 qualification in teaching, are prioritized to become One roof SD and SMP teachers.
(2) Should there be no teacher available as referred to in line (1), the provincial government may recruit teachers, who do not yet have an S1 certification for teaching.

**District Government**

**Article 4**
The district government is authorized:
- a. to deliver and supervise the delivery of formal and non-formal education for KAT; and
- b. propose candidate students for KPG or Community Colleges.

**Article 5**
The district government is obligated:
- a. to supervise the delivery of formal and non-formal education for KAT;
- b. provide teachers and education workers for formal and non-formal education for KAT;
- c. provide facilities and infrastructure for developing science and technology in order to support the delivery of quality education;
- d. provide operational budget for the activities and extension workers;
- e. provide staple items for teachers and education workers in KAT;
f. encourage the business/industry sector to actively participate in a constructive manner in the delivery and improvement of education quality;
g. ensure access to education service for students according to intake capacity; and
h. implement quality assurance based on education minimum service standards.

CHAPTER III KAT EDUCATION SERVICE

Part One
General

Article 6:
KAT education service consists of:

a. formal education in the form of basic education;
b. non formal education in the form of:
1) skills course, which is oriented towards improving the economic value of the local natural resources;
2) education on prevention and control of HIV-AIDS and other sexually transmitted diseases that is based on village communities; and
3) literacy education that is based on village communities.

Part Two
Formal Education

Article 7 Line:
(1) KAT basic education service is carried out by the district government or legal entity as education unit that is established by the community.
(2) Education service as referred to in line (1) is directed towards:
   a. equal distribution of education access that is in line with achieving the minimum service standard for education service;
   b. improving the quality, relevance and competitiveness of education; and
   c. improving the effectiveness, efficiency and public accountability.

Article 8 Line:
(1) KAT basic education service as referred to in Article 7, is carried out by using local wisdom and the local traditional community’s potential strengths.
(2) KAT basic education service as referred to in line (1) covers:
   a. Small SD, which consists of grade 1 to grade 3; and
   b. One roof SD and SMP, which consists of grade 4 until grade 6 of SD, and grade 7 until grade 9 of SMP.

Article 9 Line:
(1) SD Kecil as referred to in Article 8 line (2) letter a, can be built in villages that meets qualification.
(2) One roof SD and SMP as referred to in Article 8 line (2) letter b, can be built in sub district (distrik) that meets qualification.
(3) Small SDs are administratively integrated with one roof SD and SMP.
(4) The procedure for establishing KAT basic education shall be regulated under Governor Regulation.

Article 10 Line:
(3) Indigenous Papuans, who lives in the local traditional community, are prioritized to become teachers in Small SD.
(4) Should there be no indigenous Papuan teacher available as referred to in line (1), the district government shall recruit a non indigenous Papuan teacher.

Article 11 Line:
(3) Indigenous Papuans, who have experience in teaching Small SD and have completed their S1 qualification in teaching, are prioritized to become One roof SD and SMP teachers.
(4) Should there be no teacher available as referred to in line (1), the provincial government may recruit teachers, who do not yet have an S1 certification for teaching.
Part Three
Non formal Education

Paragraph 1 Skills Course Article 12 Line:

(1) Skills course for KAT has the function to improve personal potential by gaining skills in processing local natural resources into items that have more economic value.
(2) Skills course as referred to in line (1) is designated for indigenous Papuans, who did not have the chance to attend formal education.

Article 13 Line:
(1) Skills course can be in the form of:
   a. effective technology; and
   b. simple entrepreneurship.
(2) Skills course as referred to in line (1) shall be delivered by the district government at least twice a year.
(3) Establishing the form of skills course as referred to in line (1) shall be carried out based on the results of the research conducted by the district government.
(4) Provisions concerning the delivery of skills course shall be established by the district regional regulation.

Article 14 Line:
(1) In view of achieving the targets of skills course, the provincial government shall:
   a. supervise;
   b. provide guidance;
   c. provide specialists; and
   d. conduct evaluation.
(2) The result of the supervision, guidance and evaluation as referred to in line (1) shall be published in mass media easily accessible by the public.

Education on Prevention and Control of HIV-AIDS and Other Sexually Transmitted Diseases

Article 15
Education on the prevention and control of HIV-AIDS and other sexually transmitted diseases for KAT that is based on village communities has the function to provide early understanding of the dangers and ways of contracting HIV-AIDS and other sexually transmitted diseases within the scope of the local village community.

Article 16 Line:
(1) Every village community is obligated to establish a Community Learning Center, which specifically aims to prevent and control the development of HIV-AIDS and other sexually transmitted diseases in the local area.
(2) Selection and determining the method and education materials as referred to in line (1) shall be carried out by the local village head based on the suggestions by the local community elements.
(3) The procedure for selecting the method and education material as referred to in line (2) shall be regulated under the district regional regulation.

Article 17 Line:
(1) The district government shall provide operational budget for the activity and extension workers.
(2) The provincial government shall provide assistance in procuring specialists and education materials.
(3) Non government organizations may provide assistance in improving the quality and quantity for delivering education.
(4) Provision of budget by the district government and assistance by non government organization as referred to in line (1) and line (3) shall be regulated under the district regional regulation.
Literacy Education

**Article 18**

Literacy education for KAT that is based on village community acts as facility to free the community to be able to read, write and count and using Bahasa Indonesia in a proper way.

**Article 19 Line:**

1. Every village community is obligated to establish a Community Learning Center, which specifically aims to free community members under 45 years old in the local area from illiteracy.
2. Selection of method and education material as referred to in line (1) shall be carried out by the head of the village community based on the suggestions by the local community elements.

**CHAPTER IV CURRICULUM AND LANGUAGE OF INSTRUCTION FOR KAT BASIC EDUCATION**

Curriculum

**Article 20 Line:**

1. The provincial government shall establish a curriculum for delivering KAT basic education based on the national curriculum.
2. Establishing the curriculum as referred to in line (1) shall contain local contents based on the suggestion by the district government by taking into careful consideration the aspects of local regional potentials.

Language of Instruction

**Article 21 Line:**

1. The language of instruction in delivering KAT basic education shall use Bahasa Indonesia.
2. If Bahasa Indonesia cannot yet be used as the language of instruction, education delivery may use the local language as the language of instruction.

**KPG AND COMMUNITY COLLEGES**

**Article 30 Line:**

1. The provincial government shall establish KPG to ensure the availability of teachers for Small SD.
2. KPG as referred to in line (1) is a formal education level equivalent to SMA, which specifically trains candidate teachers for Small SD.

**Article 31 Line:**

1. In addition to KPG as referred to Article 30, the provincial government may cooperate with the public university, which has a faculty of teacher and education to establish a community college.
2. A community college as referred to in line (1), is a formal education level equivalent to two year diploma that is based on local potentials in order to meet the need for teacher.

**Part Two**

KPG

**Article 32 Line:**

1. The provincial government shall administer KPG.
2. Administration of KPG as referred to in line (1) covers:
   a. establish a quota and requirement for enrolling students;
   b. formulate and establish a curriculum;
   c. appoint headmaster, teachers and education workers; and
   d. finance the delivery of education.
3. Funds for delivering education as referred to in line (2) letter d, shall originate from Provincial Budget (APBD) and other legitimate sources.
Article 33
Requirements to become a student of KPG are as follows:
a. comes from the villages surrounding the area of Small SD;
b. graduate of SMP or equivalent schooling; and
c. receives recommendation in terms of approval for education cost by the district government.

Article 34 Line:
(1) Candidate students shall submit request to the district government.
(2) The district government shall propose candidate students, who were given recommendations, to the provincial government.
(3) The provincial government shall select and establish the candidate students based on the conditions and quota.

Article 35 Line:
(1) KPG graduates shall receive a certificate and certificate of teaching in a Small SD.
(2) Should a One roof SD and SMP lack teachers, KPG graduates may be posted as teachers.
(3) The district government shall post KPG graduates as referred to in line (1) in a KAT basic education in the respective district.
(4) KPG graduates as referred to in line (1), who have taught for 2 years in Small SD and received good assessment by the district government, are entitled to attend S1 teacher education paid by the provincial and district governments.

Article 36 Line:
(1) Graduates of S1 teacher education as referred to Article 35 line (4), are obligated to teach in KAT basic education.
(2) S1 teacher graduates as referred to in line (1), who teach in KAT basic education, are entitled to be recruited as civil servants.

Article 51:
(1) The role of the community in education covers individuals, groups, families, professional organization, business people and community organization in the delivery, management and quality control of education service.
(2) The role of the community in education management as referred to in line (1), may take the form of planning, organization, implementation and control of the quality of education delivery.
(3) The role of the community in controlling the quality of education as referred to in line (1) covers participation in planning, supervision and evaluation of education unit of KAT basic education, skills course, education on the prevention and control of HIV-AIDS and other sexually transmitted diseases based on village communities, and literacy education based on village community.

Article 52:
(1) The role of individuals and groups as referred to in Article 51 line (1), may be in the form of contributing teachers and education workers, funds, facilities and infrastructure for education delivery, and quality control for education service in education units.
(2) The role of professional organizations may be in the form of providing experts in their fields and resource persons in the delivery of KAT basic education, skills course, education on the prevention and control of HIV-AIDS and other sexually transmitted diseases, and literacy education based on village community.
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