Baseline Report

Sumba, East Nusa Tenggara

February 2019



INOVASI – Innovation for Indonesia's School Children

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The Governments of Australia and Indonesia are partnering through the Innovation for Indonesia's School Children (INOVASI) program. INOVASI seeks to understand how to improve student learning outcomes in literacy and numeracy in diverse schools and districts across Indonesia. The first phase of the Program (AUD49 million) began in January 2016 and will continue until December 2019. Working with Indonesia's Ministry of Education and Culture, INOVASI has formed partnerships with 12 districts in: West Nusa Tenggara; Sumba Island, East Nusa Tenggara; North Kalimantan; and East Java.

INOVASI is an Australia–Indonesia Government Partnership – Managed by Palladium.



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LIST OF ACRONYMS

ЗТ	border, remote and underpriviledged areas (terdepan terluar dan tertinggal)
ACDP	Education Sector Analytical and Capacity Development Partnership
APBD	local government budget funds (anggaran pendapatan dan belanja daerah)
AUD	Australian dollars
Bappeda	regional development planning agency (badan perencanaan dan pembangunan daerah)
BOS	schools' operational funds
BOSDA	regional school operational funds
BP3A	women's empowerment and child protection office
BPA	provincial accreditation council (Badan Akreditasi Provinsi)
BPMPD	village community empowerment office (<i>badan pemberdayaan masyarakat dan pemerintah desa</i>)
BPS	Central Bureau of Statistic (Badan Pasat Statistik)
DAPODIK	Basic education data
DD	village fund (<i>Dana Desa)</i>
FGD	focus group discussion
FPPS	Sumba Education Forum (Forum Peduli Pendidikan Sumba)
GGD	frontline teachers (<i>guru garis depan</i>)
Guru BAIK	INOVASI foundation literacy pilot
HDI	human development index
ICT	information and communication technology
IDR	Indonesian rupiah
IGI	teachers' union
INOVASI	Innovation for Indonesia's School Children
K3S	school principals working group (kelompok kerja kepala sekolah)
KKG	teachers' working group <i>(kelompok kerja guru</i>)
LPMP	Education Quality Assurance Council
MGMP	secondary school subject teachers' working groups (musyawarah guru mata pelajaran)
MGMP	subject teachers working group
MKKS	vocational teachers' working group
MoRA	Ministry of Religious Affairs
MoU	memorandum of understanding
musrenbang	multi-stakeholders consultation forum development planning meeting
NGO	non-governmental organisation
NSE	national education standards
NTT	East Nusa Tenggara (<i>Nusa Tenggara Timur</i>)
PAD	Original Local Government Revenue (Pendapatan Asli Daerah)
PAUD	early childhood education
PGRI	Teachers' Association of the Republic of Indonesia

PKG	sub-district based teachers' working groups (pusat kegiatan gugus)
PNS	permanent civil servant teachers
SBM	school-based management
SLB	schools for children with special needs
SPG	teacher education program (sekolah pendidikan guru)
Susenas	national socio-economic survey
UKG	teacher competence test (UKG)
UNDP	United Nations Development Program
WTA	William Touisuta Associates

EXECUTIVE SUMMARY

The provincial government of East Nusa Tenggara (NTT) and the Indonesian Ministry of Education and Culture signed a memorandum of understanding in November 2017 to begin implementing the Innovation for Indonesia's School Children (INOVASI) project in four districts in Sumba, namely: Southwest Sumba, West Sumba, Central Sumba and East Sumba. INOVASI is a collaborative partnership project in the education sector between the Australian and Indonesian governments to improve the learning outcomes of students in primary education, particularly in literacy and numeracy. The project focuses on developing, implementing and testing solutions that will work best in the local context to improve student learning outcomes through a series of pilot programs in four districts in Sumba.

Following the INOVASI project initiation, we conducted this baseline study to investigate the social and political context of basic education in Sumba. The study focuses on seven themes of investigation: (a) local stakeholders' perceptions of education quality; (b) primary education issues and challenges; (c) government programs and policies to overcome the challenges; (d) promising practices or innovations in primary education; (e) local stakeholders' views about teachers' working group (*kelompok kerja guru* – KKG) practices in each district; (f) opportunities to use the village fund (*dana desa*); and (g) the development planning meetings (*musrenbang*) to support primary education quality improvement programs. This baseline study used qualitative research methods to address the study objectives. We used interviews and focus group discussions (FGD) to collect data about the situation of basic education, based on local stakeholders' perspectives. We also carried out a literature review to identify the current policies and programs related to education at the national and local levels. Current policies and legal documents included in this review were identified during interviews and by searching electronic and non-electronic information channels.

This baseline report provides information about the issues and challenges of basic education in Sumba, as well as the proposed recommendations for INOVASI project interventions.

Local stakeholders' perspectives

The perspectives of local stakeholders regarding the definition and indicators of education quality vary, depending on their experiences in the education sector and the role of their institutions in the education system. Most of the education practitioners defined education quality according to the eight elements cited in the national education standards (NSE). While the others defined education quality using more general terms such as the inputs, processes and outcomes of education. This reflects the differing levels of knowledge and understanding of the standards of education quality in Indonesia among the stakeholders. All stakeholders, however, perceived education in Sumba as being low quality in terms of inputs, processes and outcomes. The low level of competence in literacy and numeracy among primary school students in grades one to three constitutes a problem with education quality in Sumba. There is a consensus among local stakeholders that improving the quality of teachers is the top priority for improving the quality of education, except in Central Sumba where parental support is considered more important.

Issues of education quality in Sumba

This study identified some shortcomings in education quality in four districts in Sumba. The first issue stems from the low quality of human resources in the school system. Many teachers in Sumba are not qualified teachers and lack competencies. Stakeholders also raised the issues of insufficient numbers of permanent civil servant (PNS) teachers and the unequal distribution of teachers that adversely affect the quality of education services. The lack of competencies among school principals in terms of leadership, management and supervision was also cited. The issue of principals' competencies contributes to the problems of indiscipline among students and teachers, as well as to the quality of the teaching and learning processes in schools. Furthermore, school supervisors are generally under-qualified and ineffective in monitoring the quality of teaching, learning and school management. The remote locations of schools and the topography in these areas are also challenging for school supervisors when it comes to monitoring visits to schools.

The second issue is that the low quality of human resources leads to ineffective learning processes in schools. Stakeholders stated that most teachers do not prepare for their lessons by regularly drawing up and following detailed lesson plans. Thus their teaching methods are not creative or enjoyable and they use poor practices to assess and provide feedback on student learning.

The third issue in Sumba relates to inadequate school facilities and infrastructure. Insufficient textbooks and learning tools were also mentioned in this study. Regarding literacy and numeracy issues, most schools in Sumba have not had libraries to promote a reading culture. A few schools have libraries but they are not functioning well. School infrastructure in the four districts in Sumba is described as being inadequate and of poor quality, and this issue persists due to limited funding.

The fourth issue that stakeholders raised as needing some consideration concerned the characteristics of learners in Sumba, particularly in the early grades. Most grade one students have no prior knowledge of numbers and the alphabet when they start school because they were not enrolled in any early childhood education (PAUD) programs. Students also face language barriers in school because Bahasa Indonesian is used as the language of instruction and students are accustomed to using their own native languages. The practice of child labour can also affect attendance and students' concentration in the classroom. Our informants also pointed out that being malnourished and going to school without having breakfast has a long-term negative impact on children's performance in school.

Children with certain characteristics encounter disparities and discrimination in their access to education. Children with disabilities in Southwest Sumba do not have access to regular schools or to schools designed for children with special needs (SLB). The social context of Sumba contributes to these differences. Although boys and girls have equal access to basic education, there is still a gender gap in access to higher education. For example, boys are favoured in higher education enrolment. The social castes of *maramba* (master/lord) and *ata* (servant) found in East and Central Sumba result in children from the *ata* caste not attending school. Children of the *Marapu* faith have no access to studies associated with their beliefs during religious studies classes. The remote locations of some schools in relation to people's homes and the hilly topography of some areas also affect children's access to school.

Other social contexts in Sumba were identified as impediments to education quality. Respondents perceived parents as offering limited support for their children's education. They also cited expensive cultural ceremonies as negatively affecting education quality in Sumba because these expenses have an impact on family budget allocations for education.

Local policies and government planning in the education sector

Overall, local government policies and interventions have corresponded with the local problems related to education in Sumba and local governments have allocated about 20 per cent of their regional budgets (APBD) to the education sector. However, government planning and education spending have placed little emphasis on improving education quality. Education funds are mostly spent on teachers' salaries, school facilities and infrastructure. Only a fraction of the funds have been allocated to improving education quality. Moreover, in development planning meetings, communities and even education practitioners show little concern for the quality aspect of education. The main focus of education sector planning in villages has been to meet the needs for education facilities and infrastructure.

The local government established the Sumba Education Forum (*Forum Peduli Pendidikan Sumba* or FPPS) demonstrating local stakeholders' commitment to addressing education problems in Sumba. The forum allows local governments in Sumba to advocate the national level about educational problems and needs in Sumba. The forum has also simultaneously created a movement to address education problems in Sumba.

This study also found some similarities with regard to government policies for improving the quality of teachers in four districts, namely, by allocating funds and implementing programs to improve their qualifications and competencies. In particular, the government in West Sumba provides a scholarship for local students to pursue higher education degrees through an education and teaching program.

Common policies and programs to improve literacy and numeracy exist in four districts. These are derived from the Ministry of Education's national program. However, there are some noticeable differences in the local government initiatives. Southwest and Central Sumba focus on improving teachers' competencies related to literacy and numeracy, in collaboration with universities and other institutions. At the same time, the Central Sumba district education office has developed a curriculum for literacy and numeracy to improve the learning process in grades one to three. West Sumba, on the other hand, focuses on improving the prior knowledge of learners through early childhood education programs.

With regard to local government efforts to improve the quality of education in Sumba, this baseline study noted some limitations and challenges in implementing local initiatives or policies. The low quality of the contract teachers recruited and the low qualifications of local candidates both contribute to the persistent low quality of teachers in Sumba. Training programs for teachers are not considered effective in improving the quality of teachers and education in Sumba. This study also highlights lessons learnt from the challenges encountered in implementing the literacy and numeracy curriculum in Central Sumba arising from a lack of local policy support.

Teachers' working groups

A situation analysis of the teachers' working groups (KKGs) in this study found that many groups conduct regular activities, particularly at the cluster level. These groups are more active compared to findings from an earlier study (ACDP 2016). However, the groups' activities are not optimal in terms of improving teacher quality.

Local best practices

Stakeholders mentioned some local initiatives that can be considered as best practices to improve education quality in Sumba, including school-based management and providing libraries in communities to promote a reading culture. In Central Sumba, one teacher has used school meetings to promote higher education among children and families from the servant caste (*ata*).

Partnerships

Local governments responded positively to the INOVASI project in Sumba and have shown their commitment by allocating budgets to collaborate with INOVASI as a partner in improving the quality of teachers and principals. This study also identifies other non-governmental organisations in Sumba as potential partners for INOVASI to accelerate improvements in education quality in Sumba and especially in literacy and numeracy outcomes for children in grades one to three.

Proposed Recommendations

The findings of this study show that four pilot projects that INOVASI has initiated in four districts in Sumba correspond to the local government focus on improving teacher quality by strengthening teachers' working groups and improving foundational literacy and numeracy among students in grades one to three. This report makes several recommendations for INOVASI, as well as for local stakeholders to help further improve the education system in Sumba.

Implications for the INOVASI program

Firstly, INOVASI can contribute to improving the capacities of local education practitioners. Considering current limitations on teachers' training programs in the area, INOVASI can take the opportunity to initiate model programs to improve teachers' competencies, for instance by helping to develop a curriculum for teacher training in Sumba. Such programs need to be based on the needs of teachers and should emphasise early grades teachers' competencies in boosting students' literacy and numeracy skills. Training for early grades teachers may include applying multi-lingual teaching methods that use a local language as the second language of instruction to help students overcome the language barriers. By using an experimental approach

the program could generate evidence of the effectiveness of the curriculum in improving teachers' competencies. INOVASI will need to assess the teachers targeted to participate in the experiment to establish their current levels of competence. Developing a program to improve the capacities of principals and supervisors is another intervention that INOVASI can consider to improve school governance.

Secondly, INOVASI can contribute to developing a curriculum on the foundation of literacy and numeracy with respect to a local language as the second language of instruction to overcome language barriers to learning. In the case of Central Sumba, which already has a literacy curriculum, INOVASI can collaborate with local government to test and improve the curriculum and help to promote its implementation in schools.

Thirdly, INOVASI can improve the effectiveness of the teachers' working group forum in increasing teacher quality. Improving the capacity of teachers' working group committees to manage and develop the groups' programs is essential if the groups are going to be more effective. INOVASI's pilot program activities aimed at improving teacher quality can be implemented through these groups. INOVASI can also develop and promote a discussion model for the teachers' working group meetings, focusing on problem-solving activities to find solutions for the education problems raised through this forum.

The fourth contribution that INOVASI can make is to facilitate the sharing and learning process across districts for all the unique initiatives to improve education quality implemented in each district. The learning process can be conducted through the Sumba Education Forum and will ensure ongoing movement, encourage local innovation in education and create a competitive environment to boost education quality in Sumba. Reinforcing the forum as a consortium for local government and non-governmental organisations focuses on improving teacher competencies and addressing literacy and numeracy issues in each district. A consortium could be established in each district to develop a curriculum for teachers and a curriculum on literacy and numeracy using the collaborative action research method. The consortium is an opportunity to combine all local resources to achieve the same educational purposes, widen coverage and make the program sustainable.

Finally, education practitioners and village communities need to be mobilised to shift the local mindset from focusing on infrastructure to considering the quality aspect of education in future proposals for the development planning meetings.

Policy implications

The lack of local policy support, such as regional or district regulations, can create obstacles when government wants to adopt or allocate budgets to implement new initiatives. Therefore, at the same time as its other activities, INOVASI needs to develop pilot projects and advocacy programs that will generate local policies and the legal framework to support local initiatives to improve literacy and numeracy.

Advocacy can encourage local stakeholders to focus on improving education quality and ensure that local governments support and expand programs developed by local partners to improve teacher quality and literacy and numeracy outcomes. For example, local governments could allocate budgets to collaborate with INOVASI and replicate models of the INOVASI project in other schools.

Analysing the cost-effectiveness of education policy in the four districts in Sumba would help identify potential sources of additional funding (or reallocations of existing budgets) for quality aspects of education. Advocating that local governments increase their Original Local Government Revenue (PAD) allocation specifically for quality aspects could then be based on this analysis. INOVASI continues to advocate that all local governments allocate budget support for teachers and principals' working groups as essential forums for learning. East Sumba's initiative to allocate regional school operational funds (BOSDA) is another practice that could be promoted in other districts.

INOVASI can also help strengthen the role of the district education office in: (1) implementing external and internal education quality assurance checks to monitor education quality against the national education standards, including strengthening the monitoring system for the education process in schools as conducted by education officers and school supervisors; (2) developing programs to improve education quality; and (3)

strengthening the monitoring process for recruiting local contract teachers by establishing the minimum requirements to comply with Law no 14 of 2005 on teachers and lecturers.

Initiating a customary law to reduce the impact of expensive cultural ceremonies and child labour practices on education quality, as well as to improve parental and community support for childrens' education would tackle some of the local issues raised in this study.

1. INTRODUCTION

1.1 BACKGROUND

INOVASI is a AUD49 million education program, funded by the Australian government in partnership with the Indonesian Ministry of Education and Culture (MoEC). INOVASI is designed as an eight-year program, in two four-year phases. The current, first phase began in January 2016 and will continue until December 2019. The goal of the INOVASI program is to accelerate progress towards improved learning outcomes for Indonesian students. At the sub-national level, INOVASI works with a number of partner districts, including four target districts in Sumba, East Nusa Tenggara, to identify and test teaching and learning practices that effectively improve learning outcomes in a particular context. In addition to considering population size, the buy-in and financial resources of local government and the province's need for development, Sumba was selected after a comprehensive situational analysis of the teaching and learning conditions, and the evidence of innovative district governance practices across the island.

According to relevant statistical data at the provincial level, primary education in East Nusa Tenggara still faces a number of challenges in terms of accessibility and teaching-learning quality improvements. Data from the 2016 national socio-economic survey (Susenas) suggest that only three out of four school-aged children attend school. This means that 25 per cent of children in the province have either never attended school or have dropped out. Meanwhile, Save the Children, through their report (Literacy Assessment), conveyed that 28.76 per cent of teachers do not have adequate educational backgrounds in teaching. Dealing with the literacy level, the 2016 Susenas data indicates that the literacy rate of those 15 years or older in East Nusa Tenggara is 91.52 per cent. This means that 8.48 per cent of this age group is still illiterate.

At the district level, data extracted from the local education balance sheet for 2017 (*neraca pendidikan daerah*) about teacher quality and locally allocated funds (APBD) for the education sector could potentially affect student learning results in Sumba. On teacher quality, the data shows that teachers in most districts of Sumba had lower scores on the teacher competence test (UKG) in 2017 than the average scores for East Nusa Tenggara province (48.68) and much lower scores than the national average (54.33). In addition to this, out of the 7,767 teachers in Sumba, 60 per cent do not have bachelor's degrees. In terms of local budget allocations for education, all districts in Sumba have complied with Law no 20 of 2003 on the national education system that stipulates a 20 per cent budget allocation for education. A large proportion of education funding is from transfers to the regions and the local budget only contributes about 8–13 per cent (excluding the regional transfers). These factors have resulted in poor outcomes for student learning, as indicated by the higher grade retention and drop-out rates among districts in Sumba.

The challenges cited in Sumba are corroborated by the results of the Analytical and Capacity Development Partnership study on the strategies to improve the effectiveness of basic education in regular and religious primary schools in Sumba, East Nusa Tenggara (ACDP 2016). This study identified some priority issues that need to be addressed: (1) teachers' qualifications; (2) teachers' availability and distribution; (3) allocation of sustainable resources; (4) teaching quality; and (5) readiness for learning. Additionally, this study found that the proportion of grade two students who are unable to read is still high, at approximately 30 per cent.

This baseline report on Sumba is in keeping with INOVASI's theory of change and will support the pilot programs in Sumba, as it focuses on relevant stakeholders' perceptions of particular issues in primary education in Sumba. These issues include: (1) education quality; (2) challenges (low competence in literacy and numeracy; teachers' qualifications, competence and distribution; ineffective learning processes; inadequate school facilities and infrastructure); (3) local government policies and programs for basic education quality; (4) local best practices for basic education quality; (5) profile and situation analyses of teachers' working groups; (6) government development planning and allocation of village funds; and (7) partnerships. Additionally, this baseline study aims to support pilot project design and implementation and to capture relevant issues to support pilot activity. With reference to the INOVASI theory of change and results framework, as well

as to the district planning results in Sumba, INOVASI will use these baseline results to improve, adjust and evaluate pilot program implementation. The INOVASI pilot programs in Sumba include:

- Learning-based leadership: aims to generate practice and policy changes in areas of school management and to improve literacy and numeracy;
- Using multiple languages to support literacy work: aims to improve the capacity of teachers to conduct multi-language teaching, endorsing the use of both local languages and Bahasa Indonesian to support literacy learning in East Sumba;
- *Guru BAIK*: aims to improve student learning outcomes in Southwest Sumba by addressing learning difficulties in basic competencies;
- Increasing the quality of basic literacy instruction: aims to improve early grade student literacy skills in 17 schools (15 state and two private schools) in three sub-districts of Central Sumba.

1.2 AIMS AND OBJECTIVES

The overall aim of this baseline study is to capture and provide an information base on primary education service delivery in Sumba, as well as on relevant policies that support the implementation of INOVASI pilot programs. Through this study, the direction, strategy and activities of pilot programs in Sumba can be reviewed, adjusted and improved to enhance and support the effectiveness of each pilot program. Based on this baseline data, changes resulting from pilot programs can be measured regularly and systematically.

At the pilot level, as described in the INOVASI theory of change, this baseline report will help to:

- record and identify national and local policy issues;
- diagnose and understand local challenges, policies and informed solutions;
- support context-relevant pilot program design (output):
- implement context-relevant pilot programs; and
- identify the effects of practice changes on stakeholders and student learning outcomes.

At the program level, INOVASI can use this baseline report to plot any potential changes to practices on the scale-out and system-based pilot programs and policy changes (to regulations, budgets and plans) that directly and indirectly improve learning outcomes.

The study was designed by the national monitoring, evaluation and learning division of the INOVASI program in Jakarta.

2. METHODOLOGY

The purpose of this baseline study is to develop a portrait of the current status of primary education in Sumba before INOVASI begins any interventions, The study aims to understand local stakeholders' perceptions of the quality of education and the challenges to basic education programs in the area, as well as to gain insights into any existing policies, initiatives or solutions that have been developed to overcome these challenges. This study uses a qualitative approach to data collection and thus provides in-depth information and analyses of the situation with regard to education in Sumba that would not be possible from a purely quantitative study.

2.1 DATA COLLECTION TECHNIQUE

The study used two main data collection techniques: semi-structured interviews and focus group discussions. The interviews were conducted at both the provincial and district levels, while the focus group discussions were conducted only at the district level. Reviews of relevant documents were also added to support the data analysis process. The literature review also identifies the current relevant policies and programs related to education at the national and local levels. The policies and legal documents cited in the study were identified during interviews or discussions, or through searching electronic and non-electronic information channels.

The main questions asked during the interviews and focus groups revolved around: (a) the notion of education quality according to local stakeholders; (b) primary education issues and challenges; (c) government programs and policies to overcome the challenges; and (d) other promising practices or innovations in primary education. In addition to these issues, we also sought to understand the focus group participants' views about: teachers' working group (*Kelompok Kerja Guru* – KKG) practices in each district; the village fund (*Dana Desa*); and development planning meetings and their potential to support primary education quality improvement programs. The interviews and focus groups lasted from 15 to 90 minutes and were all recorded using digital voice recorders.

The data was collected by INOVASI staff working in Sumba and another region. The baseline involved INOVASI's monitoring and evaluation staff in Sumba, as well as the local facilitators. In total, five researchers collected the data through focus group discussions and interviews.

2.2 SETTINGS AND PARTICIPANTS

The study focused on the current state of primary education on Sumba Island which encompasses four districts: Southwest Sumba, West Sumba, Central Sumba, and East Sumba. We also involved local education stakeholders at the provincial level in Kupang in our data collection activities to gain a more general of picture of basic education in East Nusa Tenggara province.

Participants in the study included a wide range of local stakeholders, from the district to the provincial levels (see Table).

Pre	ovince	Dis	stricts
1.	Regional secretary/third assistant to the governor who supervises the education sector.	1.	Head of district/regional secretary/third assistant to the district head who supervises the education sector
2.	manages the education sector in the regional people's assembly	2.	manages the education sector in the regional people's assembly
3. 4.	Head or secretary of the MoEC office The special education and services division	3. 4.	Head/secretary of MoEC office Primary education division, MoEC
-1.	(PKLK) of MoEC	5.	Social and cultural division at the regional development planning agency (Bappeda)

Table 1: List of interview participants

5.	The social and cultural division at the	6.	Head of the education board
	regional development planning agency	7.	Head of the Teachers' Association of the
	(Bappeda)		Republic of Indonesia (PGRI)/Teachers'
6.	Head of the Education Quality Assurance		union (IGI)
	Council (LPMP)		
7.	Head of the education board		
8.	Head of the Teachers' Association of the		
	Republic of Indonesia (PGRI)/Teachers'		
	union (IGI)		

For the focus discussion groups, the participants in each district were divided into two groups: group A, consisting of local stakeholders from the district education office and the Ministry of Religious Affairs (MoRA); and group B consisting of slightly more diverse elements (Table 2).

No	Group A	Group B
1	A representative of the teachers' working group (primary school teacher)	Representative of the primary education division, MoEC
~		
2	The head of a cluster of primary schools (school principal)	A representative of Bappeda at the district level
3	Primary school supervisors	A representative from the Ministry of Social Services
4	Chief of curriculum and assessment section, MoEC	A representative of the education board
5	Teachers and education personnel division, MoEC	Representative of the Ministry of Women's Empowerment and Child Protection (BP3A or BP3AKB)
6	Sub-division of programs/planning, MoEC	Village chief or the village community empowerment office (<i>Badan Pemberdayaan</i> Masyarakat dan Pemerintah Desa – BPMPD).
7	Madrasah education section at MoRA	A representative of a local non-governmental organisaton (NGO)

Table 2: List of focus group discussion participants

2.3 DATA ANALYSIS

The data analysis used in this study was mainly qualitative, involving an inductive and ongoing process that began at the data collection stage and continued up to the time of writing this report. After the fieldwork was completed, all of the raw data was organised and prepared for further analysis. The interview and focus group recordings were transcribed to facilitate the qualitative data analysis process. For interviews and discussions data, a thematic analysis was conducted using the annotated transcripts. We developed the coding and categories using both deductive logic (based on the list of questions) and inductive logic (based on new codes which emerged from the discussions and interviews). Coding was then conducted during the second phase and consisted of two processes: (1) generating initial codes to identify temporary patterns in the data: and (2) reviewing the coding to make sure it was related to the research questions and that each code reflected a different idea. The next phase was to identify initial themes from the coding, review them and then determine the final themes. Ultimately, we used an integrative analysis to triangulate the findings from the literature review and qualitative study.

3. EDUCATION PROFILE OF EAST NUSA TENGGARA PROVINCE

Geographically, East Nusa Tenggara province consists of six main islands. The province is divided into 21 districts and one municipality, with an estimated population of 5,203,514 in 2016. It has a low human development index (HDI) and was ranked 32 out of 34 provinces in Indonesia in 2016. Table 3 shows the variations in the HDI levels across districts in East Nusa Tenggara, particularly on Sumba Island. The variations reflect disparities in achieving key dimensions of human development, including: health, education and a decent standard of living. East Sumba had the highest HDI level out of the districts in Sumba while Central Sumba had the lowest. The low achievements in the education dimension and for income per capita contribute to these low HDI levels in Central Sumba for that period.

In the education dimension, the mean years of schooling shows that access to higher education for the population in East Nusa Tenggara, especially in four districts in Sumba, is generally low. On average, people aged 25 and older in those areas had only attained a primary school education. The expected years of schooling in 2016 show that the age 7 population is expected to remain in school until secondary school or up to the one-year diploma level.

District	Life expectancy at birth	Expected years of schooling	Mean years of schooling	Income per capita	HDI
Southwest Sumba	67.71	13.02	6.29	6.079	61.31
West Sumba	66.15	12.64	6.45	6.914	61.85
Central Sumba	67.73	11.93	5.12	5.907	58.52
East Sumba	64.00	12.30	6.48	9.004	63.22
NTT	66.04	12.97	7.02	7.122	63.13

Table 3: Human development index by district on Sumba Island in 2016

Source: HDI, East Nusa Tenggara, 2016

Most children under the age of six in East Nusa Tenggara have limited access to early childhood education (PAUD). The gross enrolment rate in early childhood education for 2016/2017 in East Nusa Tenggara province is 57.44, lower than the national rate of 72.35. At the district level on Sumba Island, the enrolment rates are substantially lower in three districts, with the exception of East Sumba. The lack of teachers, facilities and infrastructure for preschools, as well as a lack of community awareness of the importance of early childhood education has affected the low access to preschools in East Nusa Tenggara.

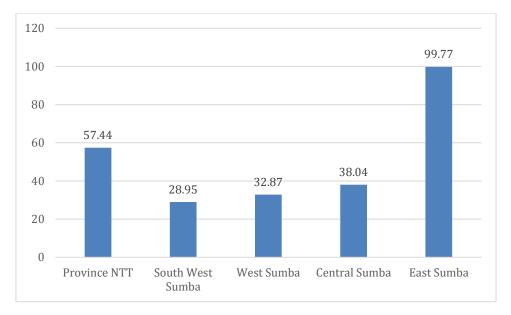


Figure 1: Gross enrolment rates in preschools for 2016/2017



Most children aged 7–15 in Sumba have access to 12 years of basic education. Figure 2 shows that the average school participation rates for children aged 7–15 in four districts were over 96 per cent in 2017. However, the figures also show that a number of children in Sumba could not access basic education. There even seems to be a downward trend in school participation for older children, especially in the 16–18 age range. The gross and net enrolment rates in 2017 (Table) show a similar decline in school participation. The East Nusa Tenggara education statistics for 2017 show that one in four children in the 16–18 age group dropped out of school. The drop-out rate is three times higher among children in rural areas than in urban areas.

In terms of gender, the figures show equal access to basic education for boys and girls. However, a gap in education access appears for the 16–18 age group when participation rates are higher for girls than boys in three districts but not in Central Sumba. This reflects the higher drop-out rate among boys in the 16–18 age group in Sumba.

According to East Nusa Tenggara province educational statistics for 2017, children in urban and rural areas have equal access to basic education, at 98.31 per cent and 98.26 per cent respectively. However, disparities in access emerge at the higher education stages. The distance to school and limited local transport facilities affect higher education rates in rural areas.

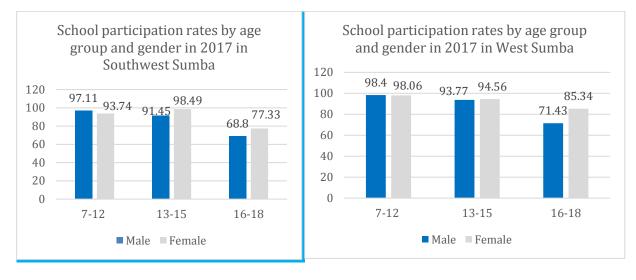
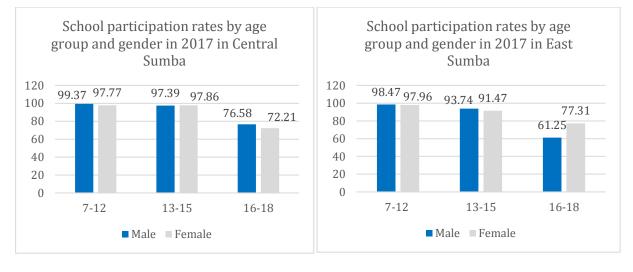


Figure 2: School participation rates by gender in four districts in Sumba



Sources: BPS 2017

Table 4: Gross enrolment rates and net enrolment rates for 201	7

		Gross enrolment rate			Net enrolment rate			
		Junior	Senior			Junior		
		secondar	secondar		Primar	secondar	High	
	Primary	у	у	College	У	У	School	College
Province	114.05	91.35	78.83	24.35	95.4	67.16	53.32	16.55
Southwest								
Sumba	124.02	89.75	57.99	18.50	94.68	61.29	41.44	14.81
West Sumba	114.94	98.12	80.32	13.79	96.78	67.66	56.54	12.68
Central Sumba	114.74	98.89	63.47	25.85	96.36	70.54	43.62	14.20
East Sumba	116.25	90.95	75.92	22.96	94.40	68.72	54.92	15.69

Source: MoEC 2017

In addition to educational access, the quality of education output in East Nusa Tenggara is low (see Table). Grade repetition rates among primary school students in 2017/2018 in East Nusa Tenggara were significantly higher than the national average (4.01 compared to 1.44). Table 3.3 also shows that repetition rates are consistently higher among boys than girls across grades. These high repetition rates are noticeably among children in grades one to three, indicating a need to improve the quality of education in the early grades.

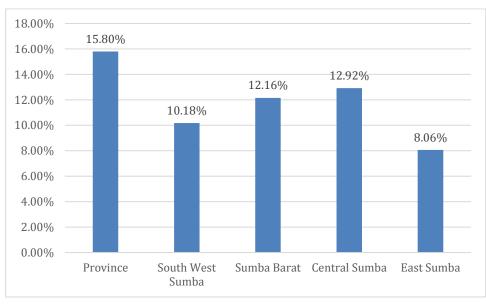
	Orada	Number of repeaters		Total no of	Repetition rate	
Grade	Grade	Boys	Girls	repeaters	Provincial	National
I		8,768	5,242	14,010	10.35	3.73
II		4,145	2,038	6,183	4.37	1.76
III		3,596	1,607	5,203	3.82	1.43
IV		2,650	1,221	3,871	2.78	0.94
V		1,874	896	2,770	2.07	0.71
VI		30	20	50	0.04	0.04

Table 5: Statistics on grade repeaters and repetition rates by grade in primary schools in East NusaTenggara, 2017/2018

Source: MoEC 2018

In terms of education funding, Law no 20 of 2003 on the national education system and the Third Constitutional Amendment of 2001 mandate that local governments allocate 20 per cent of their expenditure to education. Overall, East Nusa Tenggara province and local governments in four districts in Sumba have complied with this regulation. However, education funding at the provincial and district level mainly relies on transfers to the regions. Figure 3 shows the proportion of education funding from Original Local Government Revenue (PAD) allocated by the province and four districts in 2017. The education funds were mostly spent on teachers' salaries, school infrastructure and facilities.





Source: MoEC 2017

Low teacher quality characterises education in Sumba. Table shows that a high percentage of teachers in Sumba do not have the minimum teachers' qualifications stipulated in the Law on teachers (no 14 of 2005) of a four-year university degree or diploma. Furthermore, the teacher competence test results for primary school

teachers in East Nusa Tenggara in 2016 was 48.68 – lower than the national average of 56.69. Likewise, the teacher competence test results for primary school teachers in Sumba were below the provincial average, except in East Sumba. Regardless of teachers' employment status, the student:teacher ratio in Sumba complies with the national education standards.

Teachers' qualification			Drimery esheel
Student– teacher ratio	Below 4- year diploma	Minimum 4- year diploma	Primary school teacher competency test
17	36.98%	63.02%	48.68
30	55.50%	44.50%	43.42
21	42.80%	57.20%	44.78
26	56.50%	43.50%	46.42
16	39.70%	60.30%	54.33
	teacher ratio 17 30 21 26	Student– teacher ratio Below 4- year diploma 17 36.98% 30 55.50% 21 42.80% 26 56.50%	Student- teacher ratioBelow 4- year diplomaMinimum 4- year diploma1736.98%63.02%3055.50%44.50%2142.80%57.20%2656.50%43.50%

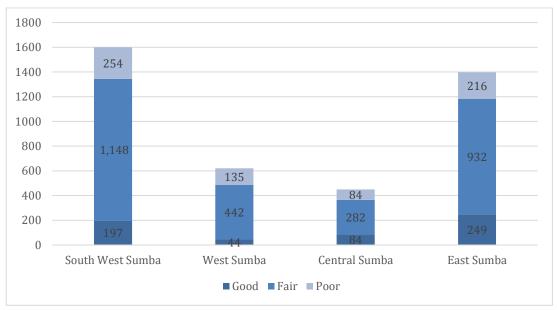
Table 6: Student: teacher ratio and teacher qualifications

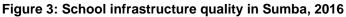
Table shows that more than 60 per cent of primary schools in Sumba have not received accreditation status. It is important to note that the information in the table does not neccessarily reflect the quality of schools in Sumba because school accreditation is conducted every four years. Furthermore the number of schools evaluated for accreditation depends on the Ministry of Education's budget and the provincial accreditation council (*Badan Akreditasi Provinsi* – BPA). Even though a school may be ready for the accreditation process, it could be on the waiting list for some time. The lack of school infrastructure and facilities remains an issue in Sumba although most schools have a 'fair' quality rating for school infrastructure to support the education process (see Figure 3).

Table 7: School accreditation status by district in Sumba, 2016

	School accreditation status in 2016 Non-			
	А	В	С	accredited
Province	0.90%	12.50%	11.50%	75.00%
Southwest Sumba		3.90%	11.40%	84.60%
West Sumba	1.10%	11.20%	7.90%	79.80%
Central Sumba		11.10%	25.90%	63.00%
East Sumba	5.10%	14.50%	7.10%	73.30%

Source: MoEC 2016





Source: MoEC 2016

4. FINDINGS

This chapter presents local stakeholders' perspectives on education quality, the current issues and challenges in primary education that affect children's learning outcomes at primary schools in four districts in Sumba. We also describe the top priorities for interventions to address these problems based on local stakeholders' perspectives. We outline the current strategic actions local stakeholders are taking to address problems with primary education and how they are implemented, followed by future directions to improve learning outcomes in Sumba in accordance with stakeholders' expectations. This chapter also presents the current situation of teachers' working groups and the development planning process.

4.1 STAKEHOLDERS' PERCEPTIONS OF EDUCATION QUALITY

This section presents local stakeholders' perceptions of education quality in East Nusa Tenggara and in four districts on Sumba Island. Findings from interviews and focus group discussions revealed a variety of perspectives on education quality. Instead of defining education quality, all participants used several indicators related to education to describe quality. Several interviewees mentioned that quality education would be achieved by fulfilling the eight components in the national education standards. However these perspectives tended to come from participants with extended experience as education practitioners (as school principals, teachers' association representatives and on education boards) or participants who had worked at district or provincial education offices or at the Education Quality Assurance Council (LPMP). We also gathered the perspectives of staff from non-governmental organisations that focus on educational issues on Sumba Island. The national education standards, laid out in Government regulation no 19 of 2005 provide a foundation and criteria for the national education system in Indonesia. The eight clusters of standards include: a) education content; (b) education processes; (c) competencies of graduates; (d) qualifications of teachers and other education personnel; (e) infrastructure and equipment; (f) education management; (g) education funding; and (h) education evaluation.

However, most interviewees described education quality using indicators referring to the components of the education system, including: inputs, processes and outcomes. The interviewees' understanding of educational quality centred on system inputs such as: teachers' qualifications and competencies, the student:teacher ratio, curriculum, infrastructure and facilities. The interviewees presumed that the quality of those components determined the quality of education output.

All stakeholders highlighted teachers as the most important input that determines the quality of education in an education system. Teachers were also recognised as the main actors in the education process. If teachers have a minimum of a bachelor's degree, are competent and receive fair compensation, then the quality of education will improve. As one participant stated:

'In my opinion, a school with quality education can be seen first from the teachers ... according to the Indonesian education standards, primary school teachers should have a bachelor's degree qualification ... If the teachers are qualified and have good experience, certainly the quality of education services will be much better' (a group B focus group discussion participant, Southwest Sumba).

Stakeholders' perspectives of the role of the teacher in the education system clearly indicates that a disproportionate level of responsibility and accountability is attributed to one actor, the teacher, to ensure the quality of education. However, all components of educational units, the national and local governments, the accreditation agency and the standardisation agency are responsible for ensuring the quality of education, as stated in Government regulation no 19 of 2005 on the national education standards and in Ministry of Education and Culture regulation no 28 of 2016 on the education quality assurance system.

Learning outcomes tended to be the second issue raised in demonstrating education quality. Participants cited diverse indicators of education quality based on learning outcomes, including: learners possessing

qualifications and life skills; national examamination results; the minimum criteria for mastery learning (as laid out in the national curriculum); and students' competence in literacy and numeracy. However, the national examinations results were mentioned most frequently as an indicator of education outcome.

'First, education quality can be seen from student competencies in writing and reading. Second, education quality can be seen when a student has noble character. Then, education quality can be seen when students have life skills' (an informant from an interview in Southwest Sumba).

A few interviewees mentioned principals' qualifications and competencies, school governance, students' characteristics or parental and community support as other components that affect the quality of education.

The diverse perspectives on education quality among stakeholders indicate a knowledge gap regarding the definitions and indicators of education quality in Indonesia as these should correspond with the national education standards. The diverse perspectives also show that local stakeholders are primarily interested in the constituent parts of the education system, in either inputs or learning outcomes. Nevertheless, these findings suggest that the low quality of teachers in Sumba is a major concern because of its potential impact on education quality. This finding aligns with INOVASI's focus on improving the quality of teachers to improve overall education quality in Sumba. Stakeholders did not express much concern about literacy and numeracy skills as important indicators of education outcome suggesting the need for discourse on this issue to raise awareness. Improving literacy and numeracy needs to be a priority and stakeholders need to collaborate with the INOVASI project to achieve this.

4.2 ISSUES AND CHALLENGES IN SUMBA

According to the local stakeholders' understanding of education quality, education in Sumba is characterised as low quality in terms of inputs, processes and outcomes. Stakeholders' perspectives on education quality centred on education inputs and in discussing education challenges participants also frequebtly mentioned education inputs. This study identified a number of shortcomings in the education system on Sumba Island.

Shortage and unequal distribution of teachers

According to the 2017 local education balance sheet the teacher:student ratios in four districts in Sumba met the national standard with a ratio of 1:32, as shown in Table 3.1. This means that the four districts have enough teachers, regardless of their employment status as civil servant (PNS) or contract teachers. Nevertheless, most interviewees stated that the districts in Sumba have a shortage of teachers, with the exception of Central Sumba. It is important to note that the local stakeholders count only the permanent civil servant teachers in assessing the numbers, as one interviewee said:

'Our problem is the availability of civil servant teachers, with under 50 per cent of the teachers required in this district' (an informant from an interview in West Sumba).

In some cases a school may have just a single civil servant as the school principal while the rest of the teachers are temporary or contract teachers. Local stakeholders raised the matter of the shortage of teachers by distinguishing between civil servant teachers and contract teachers. Concerns about the sustainability of the contract teachers' program to address the demand for teachers underpins the local stakeholders' attitude to teacher shortages.

The shortage of permanent teachers is regarded as the result of the moratorium on hiring new civil servants which has been in effect since 2015. This is combined with the impending retirement of teachers that affects the supply of permanent teachers on Sumba island. Moreover, unequal teacher distribution has aggravated the shortage of permanent teachers in rural and remote areas of Sumba Island. Most interviewees acknowledged that teachers are more heavily distributed in towns rather than in rural or remote areas. The interviewees suggested that the process of deploying teachers was politicised and this contributes to the inequality in teacher distribution. The local political and bureaucratic élites can interfere in teacher placement

for their own political interests. Furthermore, some women teachers who have been teaching in rural areas for a few years may want to be posted to towns or other areas where their husbands are employed.

To address the shortage and unequal distribution of teachers, the Indonesian government through the Ministry of Education and Culture has implemented a frontline teachers (guru garis depan - GGD) program aimed at improving access to education and addressing the lack of teachers in border, remote and underpriviledged areas (Terdepan Terluar dan Tertinggal - 3T) in Indonesia. The teachers for this program are recruited through a national selection process and are posted to remote areas in Indonesia for a minimum of ten years or according to local policy. However, some local stakeholders argue against the program for a number of reasons. Firstly, they consider it a burden on the local government budget (APBD) because funds must be allocated to pay for teachers' accommodation. Secondly, finding houses to rent for these teachers is difficult and minimum requirements, such as electricity, constrain their placement in village areas. Therefore, frontline teachers tend to live in a nearby town and commute from home to the school. The situation is considered a hurdle that means teachers are frequently late for school. Thirdly, most frontline teachers are not native to Sumba island so they find it difficult to teach students who are not fluent in Bahasa Indonesian, particularly in the early grades. This issue can adversely affect learning quality. Finally, deploying teachers who are not native to Sumba on the island can create social jealousy among the local teachers, particularly in Southwest Sumba. The competitive recruitment process precludes local people from the program because they do not meet the requirements. Applicants need to obtain a teachers' certificate through a professional training program as well as having minimum teacher qualifications.

In recent years, local stakeholders have hired local contract teachers using APBD or schools' operational (BOS) funds to meet the demand for permanent teachers. This strategy provides job opportunities for locals and also circumvents some of the issues of the frontline teachers. Clearly, four districts on Sumba island are more reliant on local contract teachers to fulfil the demand for teachers.

Teacher issues: low qualifications, lack of competencies and low salaries

Although hiring local contract teachers seemed to be an effective strategy to address the shortage of permanent teachers, the educational system on Sumba Island has inherited certain problems as a result of this strategy. The problems include having unqualified teachers with limited competence and low salaries.

1. Unqualified teachers:

- According to Law no 14 of 2005 on teachers, the general requirements for becoming a teacher in Indonesia are: (1) obtaining a minimum educational qualification of a four-year university degree or four-year diploma program; (2) demonstrating the four areas of competence required pedagogical, personal, social and professional; and (3) obtaining teacher certification. However, local stakeholders at the provincial and district levels recognise that many teachers in Sumba are not fully compliant with the law and do not have adequate educational qualifications. This corresponds with data from the 2017 local education balance sheet presented in Table 3.1. Permanent teachers who were hired in the 1970s were mostly graduates from the teacher education program (*Sekolah Pendidikan Guru* SPG) which is equivalent to the vocational secondary school level. Likewise, most local contract teachers hired by local governments and assistant teachers hired using schools' operational funds in recent years are unqualified since they are not graduates of professional teacher education programs. Many contract teachers only have secondary school qualifications.
- ii. The issue of unqualified teachers persists on Sumba Island due to the poor recruitment process for teachers. Local governments directly appointed contract teachers as permanent teachers in the last recruitment, based on their years of teaching. However, most of these teachers do not have professional teaching qualifications. Also, there is a lack of people with college degrees on Sumba Island and particularly with degrees in education or teaching so local governments have been compelled to recruit contract teachers without the required qualifications. The shortcomings of the recruitment system has resulted in the low quality of teachers in the districts.

2. Teachers' lack of competencies

As many teachers are unqualified, they lack the pedagogical, personal, professional and social competencies required. Interviewees in this study highlighted some of these issues.

- i. Teachers' pedagogical competence issues: Pedagogical competence comprises the following key skills: the ability to understand the psychology of learners and to empower them to attain their full potential through learning; and the ability to plan, implement and evaluate education and teaching. Local stakeholders in this study observed that many teachers do not have the basic knowledge of educational psychology or the essential skills in identifying appropriate teaching strategies based on learners' characteristics and stages of development. Teachers who graduate from professional teacher education programs should have this basic knowledge and these competencies although stakeholders argued that even graduates from teacher training courses may not be well versed in educational psychology. Equally, teachers who are graduates from other discipline programs or senior secondary schools do not necessarily have this basic knowledge and these skills.
- ii. Local stakeholders emphasised that poor teaching plans affect the quality of teaching and learning, resulting in poor learning outcomes in the four districts. The stakeholders stated that most teachers do not seem to prepare for their teaching and learning activities and do not regularly draw up lesson plans even though they have been trained to do this. Teachers often do not fully understand the processes involved in developing lesson plans. As many teachers are not fully computer literate, it takes longer to develop these plans manually and some teachers only use them when school supervisors are visiting. Teachers who do draw up plans may also then apply different teaching methods in the classroom. Local stakeholders suggested that teachers perceive lesson plans as merely a document to fulfil administrative requirements to be verified by school supervisors. There are also indications that some teachers just copy or buy the plans from others.
- iii. Regarding Curriculum 2013, teachers are perceived as not yet ready to implement the curriculum because that have not all been trained. The frequent changes in curriculum affect teachers' readiness to learn, adapt and implement the curriculum in their lesson plans. Moreover, grades one to three teachers need creativity and advanced pedagogical skills to implement the new curriculum as it uses a thematic integrative learning approach for students in grades one to three.
- iv. Teachers' personal competence issues: The interviewees in this study were also concerned about teachers' personal commitment – in particular their motivation or passion for teaching and the problem of indiscipline. Education practitioners acknowledged that many teachers are not proud of their profession and do not perceive the role they play as important in the education system. The relatively low salaries and incentives for contract teachers underpin this attitude towards the profession.
- v. Teachers' work ethic issues also came up during interviews and discussions. Most interviewees stressed the issue of indiscipline among teachers. Teachers are likely to be absent from school during traditional ceremonies or due to bad weather. Many teachers arrive late or leave school early, detracting from the learning time. This situation occurs as many teachers live far from their schools, in other villages, sub-districts or even in district towns. Consequently, they have long commutes to school every day, sometimes as far as 30 kms. The reasons why teachers are unwilling to live near schools include: the lack of facilities, like electricity or boarding houses for teachers; and teachers not being local to the villages where the schools are located. Furthermore, this situation also indicates the lack of monitoring of the education process in schools by school supervisors and the local government education office. Remote school locations, hilly terrain and poor road infrastructure are additional constraints that contribute to the lack of monitoring the education process in schools. The failure to enforce rules, for example on disciplinary issues, has an impact on teachers' professionalism and performance.
- vi. *Professional competence*: Local stakeholders also found that teachers are not enthusiastic about improving their competencies. According to Law no 14 of 2005 teachers who hold teacher certification and meet certain requirements are entitled to receive a financial incentive. This incentive is meant to

support teachers' professional development. However, regardless of government support, teachers are unlikely to spend the money on improving their competencies. Also, teachers are less likely to use information and communication technology (ICT) methods to learn or to improve their competencies. Teachers over 50 years old are mostly computer illiterate which causes difficulty in preparing lesson plans. Therefore, they depend heavily on DAPODIK operators to assist them with all tasks requiring computer skills. Furthermore, the quantitative baseline study in West Sumba and Southwest Sumba in 2018 found that teachers' literacy levels are particularly low in those two districts.

3. Income disparities

Even though the government policy to improve teachers' salaries based on their qualifications and certification status is laudable, it has created income disparities between certified and non-certified teachers. This gap is even wider between certified permanent teachers and contract teachers or teachers paid from schools' operational funds (BOS). For instance, a contract teacher who is paid from the local government budget (APBD) can earn IDR1,500,000 per month while contract teachers hired using BOS funds only earn IDR250,000–IDR750,000 per month. Moreover, contract teachers hired using BOS funds are not even paid during the regular salary period. Clearly, contract teachers are likely to receive low salaries that do not cover their living costs. Even teachers' transport costs can outweigh their incomes.

In the interviews, local stakeholders suggested that this situation inevitably affects contract teachers' motivation and performance. Indonesian Teacher's Association (PGRI) representatives argued that improving contract teacher salaries would motivate them and this is a prerequisite for sourcing educational quality. The teachers' unions have advocated that local governments raise the salaries of contract teachers but financial constraints (the low level of Original Local Government Revenue) have prevented them from doing this up to now.

4. Ineffective learning processes

Teaching and learning methods

- i. The curriculum is an important aspect in the educational process because it determines how knowledge, values and skills are transmitted to students. The curriculum is a foundation that guides the development of teaching and learning methods. This study found teachers use different curriculums – usually either the school-based curriculum or Curriculum 2013. This is because not all teachers have been trained to use Curriculum 2013.
- ii. The teaching methods used are not generally creative and enjoyable due to the lack of preparation. Regardless of the availability of learning aids in certain schools, teachers are less likely to use the facilities to enhance the teaching and learning process, as one stakeholder said:

'Teachers are less likely to use learning tools and to encourage students to participate in the learning process ...' (a stakeholder in Central Sumba).

iii. Some stakeholders were concerned about child protection issues with regard to teachers who use corporal punishment in schools. This can affect students' attendance at school because some students may be afraid of their teachers. It also affects teacher-student relationships in the classroom, as well as the relationship between teachers and parents because parents disapprove of corporal punishment being used against their children. However, some education practitioners considered child protection concerns a constraint to teachers disciplining students in school or during the learning process. The different perspectives on corporal punishment and child protection indicate the need to improve teachers' knowledge and experience in applying positive disciplinary practices to promote positive and effective learning processes.

5. Assessing student learning

Stakeholders pointed out problems with student learning assessment practices that affect education quality in Sumba. They observed that some teachers let students go up to the next grade in school even when the students are unable to read, write or count. This practice is rooted in teachers' perception that 'all primary students should be promoted to the next grade'. In other words, grade retention is not allowed in primary schools. Changes in the assessment methods used to evaluate student learning under Curriculum 2013 underpin the teachers' perception and practices, resulting in grade promotions for all students. Under Curriculum 2013, students are assessed holistically, based on various aspects such as attitude, social adjustment, knowledge and skills. This distinguishes Curriculum 2013 from the previous curriculum that merely focused on knowledge. However, the holistic assessment method means that primary school children with low achievement can be promoted with recommended remedial actions. The change in the assessment method most suggests that the good intention of the assessment has not been fully understood in practice.

Also, teachers tend to apply poor practices in assessing and providing feedback on student learning. For instance, teachers do not make the effort to provide feedback on students' assignments or even to correct children when they are reading or writing. Finally, the lack of communication between teachers and parents to discuss students' progress in school is also seen as negatively affecting education quality.

6. Class size

Some participants in this study mentioned a problem with the student:teacher ratio in the religious education classes because there are so few teachers for the subject. In a private school, the teacher:student ratio could be more than 40 students per teacher due to the limited number of classrooms. This situation can detract from the effectiveness of the learning process.

7. Inadequate school facilities and poor infrastructure

Inadequate school facilities are an additional impediment to the quality of education. Stakeholders mentioned some problems with school facilities. Firstly, schools in Sumba are finding it difficult to provide textbooks to implement Curriculum 2013 due to shortages from suppliers or publishers. It can take schools two years to procure some textbooks even though the schools have budget funds available through their BOS funds. This creates a barrier for teachers trying to implement the new curriculum. Inadequate learning tools were also encountered during this study. Regarding literacy and numeracy, most schools in Sumba do not have libraries to promote a reading culture in schools. A few schools have libraries but they are not functioning well with no librarians or teachers assigned to help children to access and understand the books available in the libraries.

8. Inadequate and poor quality of school infrastructure

Most interviewees believe that having adequate and high quality education infrastructure affects the learning process and education outcomes. However, the infrastructure in four districts in Sumba was described as inadequate and of poor quality. The infrastructure issue persists in all districts on Sumba Island due to the limited APBD funds for simultaneous school infrastructure development. As a result, developing school infrastructure remains a major concern for development planning each year.

The limited APBD funds force local governments to implement a development program based on priorities and needs. However, unavailable or unreliable data about the needs in each school makes it difficult to prioritise school infrastructure development. In the educational sector, the Ministry of Education and Culture regulation no 79 of 2015 on the data management system, describes the essential education data portal, known as DAPODIK, that provides information on the situation of schools in Indonesia. DAPODIK records data related to teachers and staff, students' records, facilities available in the schools and school programs. The data is expected to support policymakers in developing, monitoring and evaluating the implementation of education

programs. Nevertheless, the accuracy of the data is debated by local stakeholders, particularly by Bappeda. Therefore, Bappeda in West Sumba has taken the initiative to develop another data management system to record the needs of each school in the district.

9. Low competency in literacy and numeracy (problems with education outcomes)

In terms of education outcomes, most local stakeholders did not mention the problem of low competencies in literacy and numeracy among primary school students. They only mentioned it if the interviewers asked this question. This might not be a concern for most stakeholders due to their perception that the quality of education outputs is sufficiently represented by the national examination results and other outputs, such as students' life skills and noble character, as expressed earlier. There is a perception that the literacy and numeracy determinants are technical terms only fully understood by education practitioners. As a result, the stakeholders were unlikely to mention competencies in literacy and numeracy in discussing education outputs. It was also suggested that the lack of regularly available data on children's literacy and numeracy competencies affects local government concerns about this issue.

However, some stakeholders who were frequently involved in or exposed to the ACDP (2016) study asserted that the quality of basic education in Sumba is characterised by a low level of competence in literacy and numeracy among students in grades one to three. Some students in grades five and six consequently still have to spell out the words when reading. The recent quantitative baseline study done in 2018 in West Sumba and Southwest Sumba by the INOVASI team also found that more than half of students in East Nusa Tenggara did not pass the letter, syllable and word identification test, making it necessary for them to take the pre-literacy test. A study by William Touisuta Associates (WTA 2009) in Central Sumba also found the problem persists in the area, as a participant in this study commented:

'According to research by WTA (in Central Sumba), ... about 53 per cent of early grade students are unable to read. We have not measured other reading competencies such as the understanding on reading content, but, even at the level of knowing letters, or the ability to read ...[the competence] is still very low' (group B focus group discussion, Central Sumba).

Stakeholders also highlighted a disparity between students in urban and rural areas. The number of children who are unable to read is higher in rural areas compared to in towns. Interestingly, students who had attended early childhood education performed better in literacy and numeracy than the others because they had been exposed to the alphabet and numbers at an early stage.

This literacy problem is recognised as a barrier for children understanding teaching content, literature and understanding questions and instructions for homework or exams. This barrier results in limited educational outcomes among early grade students. It has been suggested that the lack of teacher competencies in teaching early grade students, the ineffective learning processes used and the language barrier are the root of the problems in literacy and numeracy. Moreover, the education environment is not conducive to promoting reading habits among students, due to inadequate facilities, such as limited book collections and lack of libraries.

Even though most stakeholders seemed to be less conscious of the literacy and numeracy issue in Sumba, some policies and programs have been implemented to address low literacy and numeracy levels in the four districts. The ACDP (2016) study, combined with the national strategy to improve literacy and numeracy, persuaded local governments to address the problem in Sumba. Clearly, the ACDP study (2016) provides evidence to convince and advocate local governments to address the problems in literacy and numeracy. ACDP built up local stakeholders' interest in the education issue in Sumba through evidence-based advocacy. They brought together local stakeholders in four districts in Sumba and shared information from their study that found low literacy and numeracy skills among students in grades one to three in Sumba. The ACDP team then advocated their findings among policymakers until they were added to their priority agenda. The advocacy strategy used by ACDP has led to changes in budgets and program priorities in the education sector to improve education quality. The results of the ACDP study encouraged local stakeholders to establish the Sumba

Education Forum (*Forum Peduli Pendidikan Sumba* – FPPS), which aims to monitor and evaluate the implementation of education policies and programs in Sumba for the purpose of improving education quality.

10. Learner characteristics

This study identified some learner issues that have the potential to affect education quality, as follows.

Prior knowledge of letters and numbers: A number of grade one students have never attended preschool or kindergarten, so they have had less exposure to the alphabet and numbers. This finding is confirmed by data about early childhood education enrolment in

Figure 1. It has been argued that students who attended preschool or kindergarten perform better in literacy and numeracy than others in grade one. As a result, local governments are focused on improving access to early childhood education to address literacy and numeracy issues in Sumba.

Language barriers: Most children in Sumba use their native language on a daily basis so children face difficulties in the early grades because teachers use Bahasa Indonesian as the language of instruction. This creates another challenge because teachers should be able to teach by combining the children's native language with Bahasa Indonesian to help them understand lesson content. The failure to use bilingual learning methods has been recognised as corresponding with the literacy and numeracy issues in Sumba. The language barrier is worse in West Sumba because each sub-district has different native languages. Therefore, teachers for grades one to three are expected to be able to combine these local languages and Bahasa Indonesian during their classes.

Child labour: This is regarded as a common phenomenon in the four districts in Sumba. Children work in the paddy fields to help their parents or even work for others to earn money. As one participant in Central Sumba said in a focus group discussion:

'Daily payment for planting paddy fields could reach IDR50,000 per person ...children can receive candy, then earn IDR20,000 to IDR25,000 for part-time work' (group B focus group discussion participant, Central Sumba).

Another issue in Sumba is the caste system that divides people into two different castes, namely the *maramba* caste, referring to lords or masters, and the *ata* caste, referring to servants. Disregarding current trends, this caste system persists in Sumba, particularly in East Sumba and Central Sumba. Corresponding with the caste system, the child labour issue is worse among children who are regarded as from the servant caste because they are obligated to work for their masters. Children often work after school or are absent from school. A high rate of absenteeism occurs during the sowing and harvesting periods. Moreover, children cannot concentrate in school due to fatigue. Children also do not have adequate time to learn at home. Interestingly, child labour is not considered a problem with regard to education quality because the practice is so common in the community. The different perspectives on the definition of child labour and its implication for childrens' performance in education explain stakeholders' attitude to this issue.

Finally, **the long-term effects of malnutrition** among children in Sumba affect children's ability to concentrate in class. Stakeholders mentioned that most children in Sumba do not eat breakfast before

school and this affects their performance in school. This situation will impede the implementation of the Ministry of Education and Culture regulation no 23 of 2017 on full-day school .

11. School governance issues

The effective management of schools affects the quality of education. Effective management places much more emphasis on the quality of the principal as the leader of the teachers and as the manager of all school needs. Local stakeholders, particularly in West Sumba and Central Sumba, frequently raised the issue of shortcomings related to school governance. The first of these was the lack of managment skills among school principals. Stakeholders emphasised that the principals' lack of leadership and supervision contributed to the problem of indiscipline among students and teachers, as well as to the quality of the teaching and learning process in schools. Since principals do not supervise their teachers, they are not aware that their teachers have problems and may need to improve their competencies. They are unlikely to monitor whether or not teachers prepare and apply their lesson plans. Stakeholders pointed out that principals appear to be disorganised in managing the recruitment of contract teachers who are hired using BOS funds. There are no documents to indicate that contract teachers were hired or had their contracts terminated. Furthermore, the accuracy of the basic education data (DAPODIK) also emerged as an issue related to the principals' ability to supervise the data operator.

In addition to the competence issue, stakeholders in West Sumba reported that there is a shortage of local people who could potentially be recruited as principals. This situation is another consequence of the shortage of permanent civil servant teachers in West Sumba. Although the government has developed guidelines for recruiting school principals, in accordance with Ministry of Education and Culture regulation no 13 of 2007, stakeholders at the provincial and districts levels raised issues related to the poor principal recruitment mechanism. They pointed out the unclear criteria in the selection and recruitment processes. One person mentioned that principals can keep their positions until they retire. There were indications that the principal recruitment and appointment processes had become politicised. As the process is conducted by the local government on its own, the local political and bureaucratic élites can misuse their authority to intervene in the process for their own political interests. Furthermore, inadequate training for school principals is suggested as contributing to their lack of competence.

12. The accessibility of education

One objective of this study is to capture the situation of universal access to education for all children in Sumba, regardless of their gender, social class, ethnicity, background or disabilities.

13. Equal access to primary education for boys and girls

Most local stakeholders in the study perceived that boys and girls have equal access to primary education. This finding was confirmed by the East Nusa Tenggara educational statistics report for 2017 (MoEC 2017). Furthermore the trend in education performance shows that girls perform better than boys. This indicates a shift in people's perspectives and attitudes about the importance of education for both boys and girls. However, disparities between boys and girls persist in the higher levels of education. The East Nusa Tenggara province educational statistics report for 2017 shows that the school participation rate among boys aged 16–18 is lower than for girls in this age group. This situation is the result of the higher secondary school drop-out rate among boys.

In spite of the growing awareness of gender equality in Sumba society, some stakeholders in East Sumba and an interviewee in West Sumba cited cases where parents prefer boys to pursue higher education rather than girls. This is more likely in rural areas or in families with a low economic status. This finding echoes the provincial statistics that highlight the gender disparity in higher education in the province (MoEC 2017). Traditional gender perspectives about the role of women in the community and family underpin these attitudes. These perspectives discourage parents from enrolling girls in higher education. In the context of East Sumba, early marriages also prevent girls from pursuing higher education.

14. Unavailable or inadequate education access for children with special needs

Schools for children with special needs are located in East Sumba, Central Sumba and West Sumba. In Southwest Sumba, however, children with special needs or disabilities have no access to either inclusive or exclusive education although a number of children with disabilities live in the area. We need to note that the district and provincial governments in Sumba are in the process of transferring authority from the district to the provincial governments to regulate and manage secondary schools and informal education (including education for children with special needs) after the issuance of Law no 23 of 2014. This transition period is affecting education services for children with special needs. After the issuance of the law, the plan to build a school for children with special needs in Southwest Sumba had to be postponed.

Although special needs schools have been established in the three other districts, all children with special needs in these districts do not neccessarily have access to education or receive quality education. Parents' appreciation of the importance of education for their children as well as their own levels of education and economic status affect enrolment levels at these schools. In terms of education quality, the special needs schools mostly employ regular teachers with no particular qualification to teach children with special needs. The distance to the schools also prevents parents from enrolling their children in the schools. While local governments are trying to provide inclusive schools, only a few teachers have been equipped to teach children with special needs in regular classes which inhibits the spread of inclusive schools.

15. Marapu: Sumba's ancestral beliefs are not recognised by the education system

There is a large group of Marapu followers in Sumba who want their faith recognised by local, regional and national governments. They consider their children vulnerable to proselytisation in the current education system. Marapu students are neglected during the religious education lessons in school as there are no appointed teachers able to teach Marapu beliefs. As a result, the students may decide to join the religious studies lessons of other majority religions in the schools.

16. The topography barrier affects student participation

The topography of Sumba Island has been a barrier to improving children's access and participation in education. Stakeholders reported that students often walk long distances to school (5–7kms) through hilly and mountainous areas. This affects their participation in school, particularly in the early grades. Students are tired and unable to concentrate. It has also been suggested that students' high absentee rates combined with their lack of concentration cause their low levels of literacy and numeracy in the early grades. Local governments have tried to overcome this problem by providing parallel or filial schools, particularly for grades one to three. Filial schools are small branches of the main school that have been established in remote areas to increase school enrolment and attendance.

17. The effect of the caste system on children's access to education

As explained earlier, the caste system in Sumba divides people into '*maramba*' (masters) and 'ata' (servants). Children from the servant caste do not have the same opportunities to pursue higher education because of their social status. Although the occurrence of this issue is rare, some stakeholders still recognise the implications of the system for these children's education:

'Their lords might not allow them to pursue higher education. For example, when children are in the grade six, sometimes they could not take the final exam or could not enrol at a junior secondary school after finishing primary school. There is a perception that the children can become an obstacle to their lord once they acquire a higher education degree' (an informant interview in Central Sumba).

Furthermore, children from the servant caste are likely to depend on their masters to pay their education fees. Some stakeholders in Central Sumba and East Sumba admitted that while the practice is rare, these master– servant relationships persist. In some cases, children from the servant caste can pursue higher education, just like their master's children, because they are expected to accompany and serve their master's children during their education. Some children from the servant caste are able to pursue higher education by themselves but they are unlikely to return to Sumba to resume their disadvantaged status in the community.

Overall, the findings suggest unequal access to education for all children in Sumba. Girls in Sumba remain at a disadvantage in accessing higher education. Children with disabilities in Sumba have limited access to education due to people's lack of understanding about their equal rights to education, government's priorities and the lack of trained teachers. In addition to this, Marapu followers and children from the servant caste remain vulnerable in the education system in Sumba. Therefore, we need to continue to raise public awareness about the issues and mobilise stakeholders to improve education for all.

18. Factors outside the school environment impeding education quality

Other factors impeding education quality in Sumba were identified in this baseline study as explained in this section.

19. Low parental value and concern for children's education

In this study parents were frequently described as being unsupportive of their children's education. Firstly, they perceive education as less important than their children working in the fields or elsewhere to help their parents and families. Family economic issues underpin parents' attitudes to education. Most parents consider graduating from senior secondary school as sufficient education for their children. This situation is more prevalent in rural areas than in urban areas. Parents in rural areas are less likely to: motivate their children to go to school; supervise their children's homework; and ensure children have breakfast before school and get to school on time. Local stakeholders in Central Sumba put more emphasis on the lack of parent support for children's education compared to other districts in Sumba. They consider parental support a major problem for education quality in Central Sumba.

Meanwhile, some parents are concerned about their children's education. For example, with the distances to schools, parents often share their responsibility for the child's education with the extended family. Parents living in the rural areas often send their children to live with extended family members for better access to education. In some cases, the extended family is responsible for supporting the children's daily living costs. This practice is common in Sumba society. In return, however, the children are expected to help the extended family which leaves them vulnerable to child labour issues that may once again affect education quality.

People value elaborate and expensive cultural ceremonies over children's education

- i. Local stakeholders admit that expensive cultural ceremonies have been an impediment to education quality in Sumba and can even have negative effects on people's health. These ceremonies have an impact on household budgets and parents prioritise them over their children's education. For example, a family could spend IDR25–50 million on buying animals for a ceremony but only spend a fraction of that on their children's schooling. People are under pressure and feel they will be humiliated if they do not make an effort to hold these elaborate ceremonies. However, they do not feel the same pressure with regard to their children pursuing higher education. Consequently, many children drop out of school or do not pursue higher education. Moreover, children inherit debt from their parents due to these expensive ceremonies, leaving the children vulnerable to falling into poverty.
- ii. These cultural ceremonies also affect absentee rates among students in school. Older children are asked to help during the ceremonies which can last up to seven days.

'From October to early November, there are a lot of children's ceremonies, definitely the number of students [falls compared] to other months. If there are 500 students in a school, perhaps only 300 to 400 students go to school' (interview informant, Southwest Sumba) iii. Despite the impact of cultural ceremonies on education in Sumba, all participants in this study argued that the ceremonies in Sumba need to be preserved as part of the cultural identity of the people. They suggested that simplifying the ceremonies or limiting the number of sacrificial animals would create a win-win solution of preserving the culture but reducing its impact on children's education. However, this has not yet been addressed, except in Central Sumba. The idea seems far from being achieved because it requires the consistent commitment of the whole community to agree and work on simplifying these ceremonies.

Top three priority interventions to improve education quality

Participants were asked to propose three main problems that should be addressed to improve the quality of education in Sumba districts, as presented in Table 4.1. There was a consensus that improving teacher quality is the top priority for local stakeholders, except in Central Sumba where parental support emerged as the top priority. These findings indicate that local stakeholders' interests and priorities coincide with the focus of the INOVASI project.

No	Southwest Sumba	West Sumba	Central Sumba	East Sumba
1	 Teachers: Teacher distribution and fulfil the demand for PNS teachers Improving teachers' qualifications and quality 	 Teachers: Teacher distribution and fulfil the demand for PNS teachers Improving teachers' qualifications and quality 	Parental support for student education	 Teachers: Teacher distribution and fulfil the demand for PNS teachers Improving teachers' qualifications and quality
2	Improve literacy and numeracy	Improve literacy and numeracy	 Teachers: Teacher distribution and fulfil the demand for PNS teachers Improving teachers' qualifications and quality 	Improve school principal quality
3	Fulfil the 20% ABPD allocation for education	Improving facilities and infrastructure	Improving facilities and infrastructure	Improving facilities and infrastructure

Table 8. Top three priority interventions to improve education quality in Sumba

Discussion

The study findings on the issues and challenges of basic education in Sumba are that these stem from teachers having inadequate qualifications and competencies. The poor recruitment process and unequal distribution of

permanent teachers are root causes of these teacher issues that have a negative impact on the learning processes. This in turn results in low education quality and learning outcomes in Sumba. Likewise, the limited management and supervision skills of school principals have contributed to weak school governance and low education quality. Inadequate school infrastructure and facilities remain issues due to limited APBD funds. Underscoring the importance of teachers and school principals as the enabling inputs in improving education quality, we need to develop interventions or programs to increase the capacities of teachers and principals in Sumba.

Literacy and numeracy outcomes are not up to the desired standards in Sumba. These low literacy and numeracy rates are recognised as an obstacle to children's learning and their overall comprehension of teaching content and literature as well as their understanding of questions and classroom instructions.

This study also noted some learner barriers that potentially affect education quality. These barriers include: the lack of prior knowledge of letters and numbers; the language barrier; child labour; and child nutrition that affects children's readiness to study in class. These barriers should be considered when programs are being developed to address the education issues in Sumba. The program to improve teachers' capacities should equip teachers with effective teaching methods that minimise the effects of the language barrier. Program interventions for teachers of grades one to three should also focus on teachers' competencies in teaching literacy and numeracy.

This study highlighted some contextual factors that have resulted in unequal access to education for all children. These factors include: the unavailability of schools for children with special needs in West Sumba; traditional gender role perspectives among the public; the lack of religious instruction for followers of the Marapu faith; and social constructs related to the caste system that is prominent in East Sumba and Central Sumba. The lack of parental and community support also has a negative impact on education quality in Sumba.

4.3 LOCAL GOVERNMENT POLICIES AND PROGRAMS TO IMPROVE THE QUALITY OF BASIC EDUCATION

This section discusses the current strategic actions local stakeholders are taking to address education issues in Sumba and the future directions of local government programs to improve learning outcomes in Sumba.

Sumba Education Forum as a local movement to improve education quality on Sumba Island

The ACDP (2016) study in Sumba revealed education quality issues on the island, including the low quality of teachers and the low level of literacy and numeracy among early grade students. The findings encouraged local governments in four districts in Sumba to establish the Sumba Education Forum as a manifestation of the government's commitment to tackling this issue. This is an effective platform for local governments in Sumba to advocate the national government about the problems and needs of education in Sumba. The forum also created a simultaneous movement to address the education problems in Sumba by applying similar strategies, as follows.

- 1. All districts in Sumba have appointed experienced teachers to teach students in grades one to three. The teachers have extensive experience and specific competencies enabling them to improve literacy and numeracy levels among students in early grade classes.
- 2. All districts in Sumba have allocated budgets to improve teachers' qualifications and competencies, and to strengthen teachers' working groups.
- 3. The forum also has teacher exchange programs providing learning opportunities for teachers across four districts in Sumba.
- 4. The forum also facilitates an audience between local governments in Sumba and the national government to advocate education issues in Sumba. For example, the agenda during the last audience with the Ministry of Education consisted of the following:
 - a. Advocate the Ministry of Education to establish teacher education programs at the senior secondary school level;

- b. Inform the national government that implementing the 2010 national regulations giving regional governments the right to withdraw permanent teachers from private schools, has implications for education quality in private schools. The policy is considered inappropriate in Sumba because the districts depend on private schools to provide education access in some areas;
- c. Advocate the national government to give local people the opportunity to be selected for the frontline teachers program;
- d. Request that the national government revokes the policy declaring a moratorium on hiring permanent teachers to address the shortage of teachers in Sumba.

Policy mapping in four districts in Sumba

This study attempts to map the policies and programs which have been implemented by the local governments to improve education quality in Sumba.

1. Policy on education funding

- i. This study made two different findings regarding local government policy on education funding. Some stakeholders mentioned that the local governments have allocated 20 per cent of their APBD to the education sector. However, many local stakeholders admitted that local governments are unable to comply with Law no 20 of 2003 on the national education system and the Third Constitutional Amendment obligating them to allocate 20 per cent of their budget expenditure to education. Also, the different ways of calculating education budgets explain why local stakeholders in the same districts have different answers to the question of education funding. If local stakeholders consider the total education budget includes regional transfers and Regional Original Revenue (PAD) allocations for education, then it will reach 20 per cent and they can say that local governments have fulfilled their obligations in terms of education funding. Meanwhile, if the budget for education is merely allocated from the Original Local Government Revenue, without including regional transfers, none of the districts in Sumba have fulfilled their 20 per cent allocation obligation to the education sector, as shown in Figure 3 earlier. The figure shows that education funding in four districts in Sumba relies heavily on regional transfers.
- ii. The challenges for local governments in increasing education funding from the Regional Original Revenue are: (1) the low amount of the Original Local Government Revenue used to fund government programs; and (2) limited budgets forcing local governments to allocate money to development sectors according to their priorities.
- iii. One stakeholder suggested that local governments face another challenge which is the inconsistent information from school principals and DAPODIK about school needs. Based on DAPODIK, certain schools have adequate infrastructure but the principals provide contrary information during development planning meetings. This indicates an issue related to the accuracy of the DAPODIK data that schools are meant to manage and update with regard to the state of their schools. DAPODIK includes information on teachers, students, school facilities and infrastructure that is used as the basis for disbursing benefits and social assistance to schools. Local stakeholders reported that DAPODIK was not kept up to date resulting in national government budget cuts on the funds for special allocation that are mainly used for school infrastructure. This has implications for local government priorities in developing infrastructure, including for education.
- iv. Regardless of the different perspectives on the 20 per cent of local government funds allocated to the education sector, the budget clearly affects government priorities in education development. Most stakeholders admitted that a large portion of the education budget is spent on teachers' salaries, followed by school facilities and infrastructure. A small fraction of the education budget is allocated to support programs to improve education quality, such as teacher training. This study uncovered the challenges local governments encounter in using education budgets on quality aspects. Firstly, when the large proportion of education funding comes from regional transfers, it is mainly used for teachers' salaries, facilities and infrastructure which is the purpose of the regional transfer funds. Therefore, it is difficult for local governments to focus on the quality aspects of education without increasing the budget

allocation. The reallocation of the education budget increases education funding from the Original Local Government Revenue. Secondly, improving education quality may prove difficult to achieve without implementing cost-effectiveness policies and strategies. This situation suggests the need to further analyse cost-effectiveness in education policy in the four districts to identify potential sources of additional funding (or reallocation of the education budget) for quality aspects of education.

- v. A third issue came up in West Sumba where a stakeholder suggested that the staff at the district education offices may not have the capacity to develop effective programs to improve education quality so this would be a challenge. Therefore, it is important to advocate local governments to increase their education budgets for these programs. Furthermore, local governments could adopt effective local best practice models developed through INOVASI and thus strengthen the district education office programs to improve the quality of education in Sumba. An informant from the education office in West Sumba expressed an interest in this idea during an interview.
- vi. In East Sumba, the government has allocated local schools operational funds (BOSDA) as additional grants for schools to fill the gap between the central government (BOS) grants that schools receive and their actual operating costs.

2. Policy on teachers and school principals

- i. Local governments have implemented several policies to address the shortage of teachers and to improve the quality of teachers and principals, as shown in Table 4.2.
- ii. According to Government regulation no 20 of 2003 on the national education system, local governments are authorised to recruit, post and distribute education practitioners based on need. To address the problems related to the distribution of teachers, district education offices mapped out teacher distribution to develop a strategy for teacher placement.
- iii. Aiming to upgrade teacher qualifications on Sumba Island, the local governments collaborated with Nusa Cendana University to provide distance learning for teachers. They also provided APBD funding for teachers to upgrade their qualifications through the Indonesian Open University through distance learning. Despite local government strategies to accelerate teacher upgrading, some interviewees observed that the quality of the distance learning courses offered is questionable. Apparently the Open University learning program is ineffective because it is mainly conducted in a short time period, relies on teacher self-learning and places little emphasis on practice which is essential for teachers to improve their competencies.
- iv. Since 2017, the government of West Sumba has been trying to address the shortage of teachers by providing a scholarship for young people in West Sumba to enrol in higher education and teaching degree programs. This strategy should have a positive impact on education quality in West Sumba in the long-term as local people become qualified teachers. The government has allocated IDR6 billion from the APBD to fund the program. The government also aims to establish a memorandum of understanding with universities to support the program, in particular with Petra University. However, the lack of regulation support prevented the government from implementing the program in 2017. Therefore, in 2017, with support from Save the Children, the government initiated a regional regulation on education to accommodate the scholarship program as well as other education concerns. The scholarship program is expected to be implemented in 2018.
- v. The local governments in Sumba have also allocated budget funds and implemented programs and activities to support the improvement of teacher and education practitioner competencies through working groups for primary teachers, subject teachers and vocational teachers (KKG, MGMP and MKKS). District education offices implemented these programs at the district level in line with the national education standards (no 19 of 2005), Law no 13 of 2007 on school principals and Law no 14 of 2005 on teachers which obligate governments to support such programs. Despite government support, there are still some issues in implementing this program. Firstly, the effect of the training on teachers' practices in the classroom is not monitored. Secondly, the limited budget allocated to the program results in a limited number of teachers being involved at the district level. This means that

teachers who have been trained at the district level must facilitate the transfer of their knowledge to other teachers through teachers' working group meetings. Thirdly, the training mainly focuses on subjects for the national examinations and implementing Curriculum 2013. Budget constraints force education offices to proritise these topics. Furthermore, the trainers tend to use ineffective teaching methods (one-way teaching) that negatively affect the outcomes. The study found that district education office programs for teacher training placed little emphasis on improving teachers' competencies in developing children's literacy and numeracy skills.

Table 9: Policies and programs to improve teacher distribution, qualifications and competencies

Policies, strategies and programs	Southwest Sumba	West Sumba	Central Sumba	East Sumba
Mapping teacher distribution to develop a strategy for teacher placement to address the shortage of teachers	~	~	*	~
Allocating budgets to implement teacher training activities or facilitate teachers attending other training to improve teacher competencies	×	✓	*	✓
Allocating budgets to strengthen teachers' working group activities, including at the KKG and MGMP, KKKS	~	~		✓
Allocating budgets to upgrade teacher qualifications through Indonesia Open University program	✓		✓	~
Providing a budget for teachers to enrol in a professional teacher education program		✓		
Providing scholarships for young people to enrol in education and teaching degree programs		✓		

3. Policies to improve national exam results and literacy and numeracy competencies

At the provincial level, East Nusa Tenggara has the policy outlined in Government regulation no 9 of 2012 on the 'Gong Belajar' program encouraging parents and communities to monitor children's learning time at school and at home. The six-month program obligates all schools to provide preparation classes for grade six students before the national exams. It receives support from BOS funds, school committees and parents. Little information on the implementation of this policy is available except for in Southwest Sumba where the district reported that the exam preparation classes are still being conducted.

Local governments have implemented programs to improve literacy and numeracy in four districts. Some programs are derived from the Ministry of Education's national program. For example, district education offices have adopted the national literacy movement program based on Ministry of Education Law no 21 of 2015. The law obligates every school to implement fifteen minutes of individual reading before lessons start although not all schools in Sumba have adopted the policy. Local governments have also implemented other national programs, including providing books for school libraries and participating in science competitions aimed at improving literacy and numeracy. However, the effectiveness of the book provision program in improving literacy is debatable according to some local stakeholders because the program merely focuses on providing books without further activities to promote a reading culture.

In addition to these local initiatives derived from the national program, West Sumba has focused on improving children's access to early childhood education and strengthening these services to improve literacy and

numeracy levels. According to an interview with Bappeda in West Sumba, the local government has allocated IDR4 billion for early childhood education to be used for salaries and training for teachers, infrastructure and facilities.

'We have allocated four billion rupiah for the PAUD program, of which two billion rupiah is used for PAUD teachers' salaries ,... for infrastructure, facilities, and the training of PAUD teachers...' (interview informant, West Sumba).

'To improve education quality, we have implemented a policy that obligates all villages to establish early childhood education schools. In total, we have 164 early childhood education schools in West Sumba ...We had a thought ... if children aged three to six can enrol in early childhood education programs, the children [in grade one of primary school] will be different from the others who did not enrol in early childhood education. They will at least have prior knowledge of the alphabet. Therefore, we will be managing the early childhood education program seriously' (interview informant, West Sumba).

In addition to this, local governments have also collaborated with universities and institutions to improve teacher competencies in teaching students in grades one to three, and to develop learning modules as well as curriculum focusing on literacy and numeracy. In Southwest Sumba, the government has collaborated with Atmajaya University to train teachers on literacy for early grade students. This program is called 'Integrating the Indonesian language with local mother-tongue languages'. Southwest Sumba has been piloting the 'Kuark' program, in three primary schools which promotes context and enquiry based interactive learning. The Central Sumba district education office developed a literacy curriculum for early grade classes in 2017 which they promoted for use in all schools in the district. However, monitoring this program became a challenge because no budget was allocated for the exercise. The Central Sumba government has collaborated with William Toisuta Associates (WTA) to train teachers in effective teaching practices for literacy and numeracy, and to assist and monitor their teaching through teachers' working group meetings facilitated by the consultants. These initiatives demonstrate local governments' interest in and commitment to improving literacy and numeracy. These various initiatives offer opportunities to generate local-based practices to address education issues in Sumba. The Sumba Education Forum is a strategic forum to encourage local stakeholders to share, learn and promote local best practices to improve literacy and numeracy in Sumba.

Local program	Southwest Sumba	West Sumba	Central Sumba	East Sumba
Local governments assigned experienced teachers to teach grades one to three	✓	✓	√	✓
District education office has adopted the national program on literacy that obligates every school to implement 15 minutes of reading before lessons	✓	✓	✓	✓
Science competition (Science Olympics) which is a national program	✓	✓	√	✓
Allocating APBD for school library books under the budget item on 'developing a reading culture and library guidance'	✓	✓	✓	✓
Conducting research and training for grades one and two teachers on literacy and numeracy with Atmajaya University	✓			
Piloting the Kuark program in three primary schools to promote context and enquiry based teaching and learning	✓			
Increasing children's enrolment in early childhood education (PAUD) and improving the quality of PAUD		✓		
Establishing the curriculum services team to develop a literacy curriculum			✓	

Table 10: Local initiatives to improve literacy and numeracy

Hiring an educational consultant (WTA) to develop	✓	
training programs for teachers to improve the quality		
of literacy and numeracy		

4. Policy to reduce the impact of cultural ceremonies on children's education

West Sumba

The government collaborated with Gadjah Mada University two years ago to research the impact of cultural ceremonies on children's education in West Sumba. The study recommended that government encourage communities in the district to simplify their ceremonial practices since these expensive practices ultimately negatively affect children's education. Therefore, the government aims to initiate local regulations on 'frugal living' to limit the number of sacrificial animals and the number of days required for these cultural ceremonies.

Central Sumba

The government has launched a customary law called the 'three moral movements', comprising a back to the field movement, the safe village movement and the frugal lifestyle movement. This customary law was established to respond to social problems, in particular to 'the tendency of ignoring the cultivation of idle fields, the tendency to mistakenly interpret cultural values that lead to a hedonistic lifestyle, as well as significant security issues' (Ratau *et al.* 2012). The customary law also includes sanctions as law enforcement elements. It is considered an effective approach to promoting social change in Central Sumba.

Five villages in Central Sumba have initiated village regulations to reduce students' absentee rates due to children working with their parents and assisting at cultural ceremonies. The regulation, launched in March 2018, aims to empower parents and communities to monitor children's participation in schools and to support their education.

Discussion

This section described the baseline results on local governments' current policies and programs for improving education quality in four districts in Sumba. Overall, the local government policies and interventions implemented correspond with the top three priority problems local stakeholders in this study deemed urgent to address. The study found some similarities in the four districts with regard to government policy to improve teacher quality by allocating budgets and implementing programs to improve teachers' qualifications and competencies.

In addition to improving the quality of the current teachers in West Sumba, the government implemented a policy of scholarships for local senior secondary school graduates to pursue degrees in education and enrol in teaching programs. While the policy may not have immediate implications for improving education quality in primary education, it has the potential to increase local capacity and improve education quality in the long term.

Common policies and programs to improve literacy and numeracy in the four districts have been derived from the national education program, including a national program on literacy, science competitions and providing books for school libraries. However, there are also differences in local government policies on literacy and numeracy issues. Southwest Sumba and Central Sumba have focused on improving teachers' competencies related to literacy and numeracy, working in collaboration with universities or other institutions. At the same time, the education office in Central Sumba is improving the learning process in grades one to three by developing a curriculum for literacy and numeracy. Meanwhile, West Sumba focuses on improving learners' prior knowledge through an early childhood education program. This program aims to ensure children have prior knowledge of literacy and numeracy when they enrol in primary education and thus to accelerate their progress. The variety of initiatives suggests an opportunity to generate local practices. INOVASI can use the Sumba Education Forum to encourage sharing, learning and promoting local best practices to improve literacy and numeracy in Sumba.

The limitations of some of the teachers' training programs provide an opportunity for the INOVASI project to collaborate with local stakeholders and develop and contribute model programs to improve teachers' competencies in Sumba. Model programs for teacher training should emphasise teachers' competencies that will improve literacy and numeracy among students in grades one to three.

This study highlighted lessons learnt from the challenges in implementing the literacy and numeracy curriculum in Central Sumba. The lack of local policy support creates an obstacle for governments wanting to adopt and allocate budgets for new initiatives. Therefore, pilot projects and advocacy to produce local policy should be developed at the same time as the INOVASI pilots are being implemented. With regard to the multi-language model for teaching and instruction that INOVASI will help develop, Law no 20 of 2003 lays out a national policy that can serve as a legal framework to support the initiative. This law allows the diversification of curricula in Indonesia based on local contexts (Article 38:2) and the use of local languages for teaching and instruction (Article 33:2). However the law needs to be included in district regulations to provide the legal framework in allocating budgets and implementing the program. Likewise, advocacy action is needed to establish local regulations that support the development of programs to improve teacher quality to ensure that district education offices can easily adopt these programs.

4.4 LOCAL BEST PRACTICES TO IMPROVE BASIC EDUCATION QUALITY

Local stakeholders recognised some local best practices that have contributed to education quality. Individuals, institutions and village governments have implemented various practices that aim to improve children's competencies in literacy and numeracy.

- 1. Some local stakeholders recognise school-based management (SBM) as a best practice that UNICEF has promoted in Sumba. This approach aims to improve school management and thus improve education quality overall. Despite the sustainability of this approach being questionable in Sumba districts, the local government of West Sumba has allocated a budget to implement this approach acknowledging its potential to improve education quality in the district. Even though one study found that school-based management in Indonesia had limited success in terms of significant changes in school practices and students' achievement, it is still considered a promising practice in improving education quality (Vernez 2012).
- 2. Malatak village in West Sumba established a library using village funds.
- 3. Save the Children implemented the 'Pos Baca' program to improve children's literacy in some villages in Central Sumba and West Sumba in 2017.
- 4. A teacher in Central Sumba has promoted access to higher education among children and families of the servant caste. This has resulted in many children from this caste being able to pursue secondary school education or even university degrees. The teacher used parents' meetings and also invited their 'masters' to raise awareness and advocate equal access to education for children from the servant caste.
- 5. In 2017 some teachers in Central Sumba established personal libraries that a wide range of people in their communities can access. They use their own houses to set up the libraries which are open twice a week. They have created a movement to collect used books from the community and from elsewhere to boost the book collections. They have also received donations of books from people on Java Island.

4.5 PROFILE AND SITUATION ANALYSIS OF THE TEACHERS' WORKING GROUPS SUPPORTED BY LOCAL GOVERNMENT

The Indonesian government set up teachers' working groups to improve teachers' pedagogical and professional competencies. These include primary teachers' working groups (*Kelompok Kerja Guru* – KKGs), based on primary school clusters and secondary school subject teachers' working groups (*Musyawarah Guru Mata Pelajaran* – MGMPs) based on secondary school clusters. These working group are learning forums where teachers can share information, teaching methods, experiences and learning tools. In addition to the school-level teachers' working group, there are sub-district based teachers' working groups (*Pusat Kegiatan Gugus* – PKG). Similar working groups have been formed for school principals (*Kelompok Kerja Kepala Sekolah* – K3S).

A situation analysis of the teachers' working groups in this study showed that their activities have improved since the ACDP study (2016) found that the groups in Sumba were inactive or stagnant. While school-level groups have generally remained inactive, most of the sub-district clusters now hold activities at least twice a year. Some clusters even conduct meetings every two months. Local stakeholders highlighted disparities in quality among these groups but this is determined by the quality of their committees that need to be able to develop clear plans. Local stakeholders described some teachers' working group activities, for example: teacher training to develop learning tools; teacher's performance evaluation; evaluation of the use of teaching materials; launching the Curriculum 2013; and other similar activities. The teachers' working groups also invited resource people from the district, provincial and national education offices. One stakeholder provided an example of a good quality teachers' working group:

'The teachers' working group of Madidi Palagugus primary in the Madidi Palamedu cluster ... has a regular schedule to conduct activities at the sub-district level. They have a schedule to discuss particular problems in the regular meeting. For instance, they have developed learning content, lesson plans and other programs (related to the teaching and learning process) with all school representatives in the cluster. They even discuss school budgeting' (Head of the primary education division, Central Sumba district education office).

As primary and subject teachers' working groups are government programs, all schools are obligated to allocate budget funds from BOS to support them. District education offices have allocated funds from their APBDs to strengthen teachers' working group programs, with the exception of Central Sumba. Central Sumba did not allocate a budget for teachers' working groups in 2018 due to another priority, namely the Curriculum 2013 training program. Central Sumba plans to support teachers' working groups in 2019. The budget from the APBD was used to fund the teachers' working group activities at the sub-district and district level which were initiated by the district education office.

This study also identified some non-governmental organisations and institutions that have implemented programs through teachers' working groups to improve teacher quality. These findings show that these interventions and local governments commitment to strengthen teachers' working groups have significantly raised the quality of these groups.

Evaluation of teachers' working group activities is not yet optimal

Despite teachers' working groups now being active in all districts, interviewees asserted a number of challenges for these groups in achieving their aims.

- 1. Participant issues:
 - a. Many teachers have faced challenges in applying the knowledge or skills they acquired through teachers' working groups due to their lack of computer literacy. For instance, most teachers still write their lesson plans manually.

- b. Some teachers perceive their involvement in teachers' working group as just a formality to confirm their participation in the program and this affects their motivation and concentration during the activities.
- c. Teachers' competence levels and needs are not considered when determining who should attend the teachers' working group activities. Therefore, the same teachers are likely to be selected each time. One participant in a focus group discussion suggested that principals should identify the competencies of the teachers in their schools and prioritise teachers with low competencies to attend the teachers' working group activities.
- 2. Limited budgets affect the number of teachers who can become involved in teachers' working group activities. Moreover, the lack of incentives in terms of transport costs discourages teachers from attending the activities, particularly for teachers from remote areas.
- 3. Program issues:
 - a. Teachers' working group activities have placed much more emphasis on administrative aspects such as coordinating, consolidating schedules and preparing for semester and national exams. They also focus on training teachers on Curriculum 2013.
 - b. The training and discussion methods used in teachers' working group activities are not always conducive for the learning process or do not encourage all participants to be fully engaged in the discussion. The duration of the training sessions is often considered too short to give teachers adequate time to understand the content.
 - c. The effectiveness of teachers' working groups in improving teacher quality is not well monitored. The activities need to have clear outputs which can be measured and monitored to evaluate their effectiveness. Furthermore, principals do not monitor improvements in teachers' competencies or practices after the teachers' working group activities.
 - d. Teachers' working group activities are usually conducted on weekdays which affects teaching and learning time in schools. Some participants suggested that teachers' working group activities should be conducted during school holidays.

4.6 GOVERNMENT PLANNING IN THE EDUCATION SECTOR THROUGH DEVELOPMENT PLANNING MEETINGS AND THE USE OF VILLAGE FUND ALLOCATIONS

This section describes how communities and local governments discuss and prioritise education needs in government planning, in particular in the multi-stakeholders consultation forum for development planning. We explored the development planning process in the interviews and discussions and this section reports on the participants' observations. This section also explores stakeholders' perspectives and practices in implementing the village budget policy to support education in Sumba, based on Law no 6 of 2014 on villages, Law no 60 of 2014 on village budget policy and Ministry of Finance Law no 49/PMK.07 of 2016 on procedures for the allocation, distribution, use, monitoring and evaluation of village budgets.

The multi-stakeholders consultation forum for development planning

There is some debate about how effectively the development planning meetings can accommodate participative planning. Some people see these meetings as a bottom-up decision making process that supports community aspirations. However, others perceive the process as just a formality with entrenched approaches to development planning continuing. One participant said that while the meetings appear to be a synchronising process for government programs through an audience with the community, all decisions about development priorities have already been made with no consideration for the aspirations expressed in the planning meetings. We observed a development planning meeting in Loli district.

Participants in the development planning meeting for the education sector at the district level were mainly delegates from schools, including teachers and school principals, who were appointed by villagers to attend the meeting. The government also invited delegates from the teachers' association, education boards and the

district education office in West Sumba to the meeting. It seems that school delegates were selected to be participants in sub-district development planning meetings because their proposals were about the top five priorities based on the village development planning meeting. School delegates were expected to be able to prevail in the discussion process at the sub-district development planning meeting. Both men and women were equally represented at this meeting.

Prior to the discussions, the representative from Bappeda in West Sumba posted a summary of the top five priorities of education needs from all villages in the sub-district on the wall, so that all participants could engage in the forum discussion. The summary included information on the education needs but no details about which schools were represented in the summary (see images 1 and 2). Images 1 and 2 clearly show that the main focus of education sector planning in all villages is to meeting the education facilities and infrastructure requirements. Communities show little concern for the quality aspects of education, as one stakeholder observed:

'Out of the many development planning meetings I've attended, aspirations about improving education quality are very rare but people tend to focus on infrastructure. This aspiration is even voiced by teachers ... so their mindsets are still focused on meeting facility and infrastructure requirements.' (representative from Bappeda, West Sumba).

According to observations of the development planning process in the Loli district in West Sumba, there was little space to openly discuss education needs. The discussion process appeared more like a competition between interests. The process provided little space for the reasoning behind the needs as listed in the summary, such as why a certain need should take priority over another. The discussion process focuses on listing priorities without offering any supporting evidence (data) or clear reasons to determine the urgency of each proposal. It took about thirty minutes to decide on the top ten priority education needs for Loli district. There was no difference in men and women's involvement in the discussion. The role of the delegates from the education office was more to observe than to engage in the discussion. After the district-level meeting, Bappeda conducts a survey of schools whose proposals are among the top priorities for government programs for the education sector. This survey is the final consideration to decide whether or not a school proposal will be approved.

With regard to the development planning process, it is clear that the delegates play an important role in providing reasons and evidence on the needs of education to generate thoughtful discussion during the development planning forum. Village communities need assistance and empowerment to shift their mindset from focusing on infrastructure to considering the quality aspects of education in future proposals raised at development planning meetings.

The village fund

Local stakeholders felt that village funds could not be used to improve education needs, except for the early childhood education program, because they only have the authority to allocate funds for this area. The needs at the primary and junior secondary school levels are under the authority of the district governments, while senior secondary schools are under the authority of the provincial government. Village funds can only be used for school uniforms or to offer financial assistance for education. However, as listed under the best practices earlier, Malatak village in West Sumba managed to use village funds to provide a library.

Despite the scope of authority of the village leaders they can only allocate village funds for early childhood education. Stakeholders highlighted some constraints in accessing village funds for education.

- 1. The regional and village mid-term development plans prevent new initiatives from being funded by the village fund due to the lack of regulation to support the adoption of these initiatives.
- 2. The lack of accurate data about the education situation in villages impacts on the small amount of space provided to discuss education concerns during village planning.

- 3. It was suggested that the village leader's qualifications and experience have an impact on the quality of village planning.
- 4. Community perspectives on village fund allocations still focus on facilities and infrastructure.

4.7 PARTNERSHIPS

1. Lessons learnt from non-governmental organisations in Sumba

Most of the participants in this study recognised that non-governmental organisations working on Sumba Island have had a positive impact on the community. These organisations are perceived as supporting local government to improve educational quality through various programs in Southwest Sumba district. They contribute to transforming people's mindsets about the need for education and strengthening the education system through various development activities for teachers, children and parents. These organisations even help to provide school facilities and build infrastructure. However, some lessons have been learnt regarding the drawbacks of the non-governmental organisation approach.

- Non-governmental organisation programs can be difficult to replicate because they do not always correspond with the government development focus as stated in the regional and village mid-term development plans or in the various strategic plans. Usually, there are no regulations to support the government in adopting or replicating these programs, resulting in no budget allocations being available to replicate the program. Therefore, it is important to initiate local regulations to ensure programs are sustainable.
- 2. Leadership changes in government can affect collaboration with non-governmental organisations and commitment to their programs.
- 3. Differing approaches and institutional policies impact on stakeholders and communities' attitudes towards non-governmental organisations and other local stakeholders. For instance, different policies on compensation for transport costs to get to training courses may affect participants' motivation to attend training conducted by either non-governmental organisations or government. People prefer to get involved in activities that offer compensation.

2. Potential collaboration with the INOVASI program

Local governments in four districts in Sumba have confirmed their support for the INOVASI project by allocating budget funds to collaborate with the project to improve teachers and principals' competencies. These budget allocations are aimed at monitoring and replicating INOVASI's pilot programs. Local stakeholders mentioned some expectations with regard to the INOVASI project in Sumba, as shown in Table 4.4. These expectations suggest that local stakeholders' interest could lead to further collaboration. This study also identified potential collaboration with some non-governmental organisations that focus on basic education in Sumba, as shown in Table 4.5.

No	Southwest Sumba	West Sumba	Central Sumba	East Sumba
1	Improving teacher quality through KKG	Improving school principal competence and developing criteria and a mechanism for principal recruitment	Strengthening KKG with a focus on improving teacher competence to boost literacy and numeracy	Improving teacher quality
2	Developing curriculum on literacy	Facilitate audiences between		Strengthening KKG by improving the

Table 11: Stakeholders' expectations to collaborate with INOVASI

	and numeracy for students in grades one to three	policymakers in Sumba and the national government to advocate for improvements to education quality in Sumba	capacity of facilitators and the discussion process in KKG, for example by applying the problem-driven iterative action method
3	Improve collaboration with local government and NGOs	Developing curriculum on literacy and numeracy for students in grades one to three with respect to local languages	
		Strengthening KKG with a focus on improving teacher competence to boost literacy and numeracy	

Table 12: Local stakeholders mapping

Southwest Sumba	West Sumba	Central Sumba	East Sumba
 ChildFund: emergency response, school sanitation, health education program Wahana Visi Indonesia: education Donders William and Lily Foundation HIVOS: promote the use of IT in schools 	 Save the Children: focuses on PAUD, improving teacher competence through KKG, improving literacy and numeracy, and initiate local regulations on education Sumba Foundation Levico – Victor Laiskodat: supplies books for schools Bahtera Foundation: health and education HIVOS: promote renewable energy Yakkum (Christian Foundation for Public Health) 	 Sumba Foundation: reading space WTA: improving teacher competency, literacy and numeracy. Save the Children: Improving teacher competence, literacy and numeracy YWKW: initiate village regulations to increase child participation in school. Yapmas (<i>Persekolahan</i> <i>Nusa Cendana</i> <i>Foundation</i>): conducts training and monitoring of education in schools Wahana Foundation: has a program for junior high school (SMP) Foremba Foundation: child protection. DBEP: infrastructure 	 IOA-Indonesia Overseas Alumni: supplies books and supports training for teachers and school principals WVI: education and child protection Yaslalti Disabilities: focus on disability issues Childfund with Sumba Integrated Development: child-friendly community MCAI, UNDP: economic empowerment Hivos: renewable energy

	focus on disability	
	issues.	
7.	Suft Aid	

5. CONCLUSIONS AND RECOMMENDATIONS

Previous chapters described and discussed findings from this baseline study of the INOVASI project in Sumba. Activities included secondary data analysis and a qualitative study involving the participation of local stakeholders at the provincial level and in four districts in Sumba. This chapter draws conclusions from the assessment and proposed recommendation for the INOVASI project design. The overall findings and recommendations are summarised in Table 5.1.

Table 13: Summary of findings

Education issue	 Low teacher qualifications and quality Low principal management and supervision skills Low education outcomes with regard to literacy and numeracy Learner barriers to learning Unequal access to education persists Lack of school facilities and infrastructure Contextual factors influencing education quality, such as expensive cultural ceremonies and lack of parental support for children's education,
Enabling factors	 National policies available to support the development of teacher programs, a curriculum in line with the focus of the INOVASI project Working groups available through the Sumba Education Forum Local government commitment to supporting INOVASI as expressed in a MoU Local governments allocated budget funds for KKGs in Southwest Sumba, West Sumba and East Sumba. Various local initiatives have been implemented to improve literacy and numeracy Other NGOs also work in Sumba to address education issues
Focus for intervention	 Improving the quality of teachers and developing curriculum with a focus on literacy and numeracy Improving the quality of school principals as well as school supervisors Strengthening the KKG as a forum for improving teachers' capacities Strengthening education offices to develop curriculum and training programs for teachers to improve literacy and numeracy Establishing local regulations as legal frameworks to support the implementation and monitoring of local initiatives Parental and community support for education Advocate local governments to focus on budgets and programs to improve education quality

The study found that low education quality in Sumba stems from the low quality of teachers and principals running education services in Sumba. This situation has led to ineffective learning processes and low education outcomes, particularly in terms of literacy and numeracy. Learner barriers negatively impact on students' ability to becoming involved in the learning process and to understand instructional contents. These findings suggest unequal access to education for all children in Sumba. Girls in Sumba remain at a disadvantage in accessing higher education. Access to education for children with disabilities in Sumba is limited by a lack of understanding about their rights to equal access to education, government priorities and a lack of trained teachers. In addition to this, followers of the Marapu faith and children from the *ata* caste remain vulnerable in the education system in Sumba. The low level of support from parents and the community has been recognised as an impediment to improving education quality in Sumba.

This study also identified some enabling factors for improving education quality in Sumba. Firstly, the establishment of the Sumba Education Forum by local stakeholders shows their commitment to addressing

education problems in Sumba. The government also signed a memoradum of understanding to support the INOVASI project in Sumba. Secondly, local governments and other stakeholders have implemented various local initiatives to improve education quality. This study found some similarities with regard to government policies in four districts to improve teacher quality, namely by allocating budget funds and implementing programs to improve teachers' qualifications and competencies. In addition to improving the quality of the current teachers in West Sumba, the government is providing scholarships for local people to pursue degrees in education and enrol in teaching programs.

There are common policies and programs to improve literacy and numeracy in four districts and these were derived from national education programs. However, there are noticeable differences in local governments' initiatives to improve literacy and numeracy. Southwest Sumba and Central Sumba focus on improving teachers' competencies related to literacy and numeracy, in collaboration with universities and other institutions. At the same time, the education office of Central Sumba is improving the learning process in grades one to three by developing curriculum on literacy and numeracy. Meanwhile, West Sumba focuses on improving learners' prior knowledge through early childhood education programs.

With regard to local government efforts to improve education quality in Sumba, this baseline study noted some limitations and challenges in implementing local initiatives or policies. The low quality of contract teachers recruited and the low education qualifications of local candidates has contributed to the persistently low quality of teachers in Sumba. Training programs for teachers are considered less effective in improving teacher and education quality in Sumba. This study also highlighted lessons learnt from challenges in implementing the literacy and numeracy curriculum in Central Sumba due to a lack of local policy support.

Some stakeholders recognised a number of local best practices to improve education quality This study also identified potential collaborations with some non-governmental organisations and other institutions that have a similar focus on improving teachers' capacities and education outcomes.

The following are suggestions for improving the quality of education in Sumba, based on the findings. **Program implications for INOVASI**

- 1. There is an opportunity for INOVASI to contribute model programs for improving teacher competencies, for example, a curriculum for teacher training. Such programs should be developed based on teachers' needs. The curriculum for teacher training needs to focus on improving teachers' capacity to teach children in grades one to three to boost literacy and numeracy levels. It may include applying a multi-lingual teaching methods that use local languages as the second language for instruction to help children overcome the language barrier. Applying experimental approaches is an option to help build evidence of the effectiveness of the curriculum in improving teacher competencies. Assessments of the teachers who will be a targeted in the experiment need to be made to establish their current level of competencies.
- 2. INOVASI can contribute to developing the curriculum on the foundation of literacy and numeracy with respect to a local language as the second language for teaching instruction to help overcome the language barrier in the classroom. In the case of Central Sumba, which already has a literacy curriculum, INOVASI can collaborate with local government to test and improve the curriculum, and then promote its implementation in schools.
- 3. INOVASI can help develop the teachers' working groups as effective channels in increasing the quality of teaching and learning. Improving the capacity of teachers' working group committees to manage and develop programs is essential to making these groups more effective. The INOVASI pilot activities that aim to improve teacher quality can be implemented through the teachers' working groups. INOVASI can also develop and promote a model of discussion for these groups that focuses on solving the education problems raised in the forum.
- 4. The INOVASI project can facilitate the sharing and learning process across districts regarding the unique initiatives to improve education quality implemented in each district. The learning process can be conducted through the Sumba Education Forum and create an ongoing movement to encourage local innovation in education and develop a competitive environment to boost education quality in Sumba. The forum can be reinforced as a consortium for government and non-governmental organisations that aim to

improve teacher competencies and address literacy and numeracy issues in each district. A consortium can be established in each district with the agenda to develop a literacy and numeracy curriculum and a teacher training curriculum using the collaborative action research method. The consortium can provide an opportunity to combine all local resources to achieve shared education goals, widen the coverage areas and strengthen sustainability.

5. The program needs to assist and empower education practitioners and village communities to shift their mindsets from the focus on infrastructure to the quality aspect of education in future proposals for development planning meetings.

Policy implications

- With regard to INOVASI's four pilot programs, INOVASI needs to advocate for local governments to enact policies to create the legal framework to support local initiatives to improve literacy and numeracy. Programs developed by local partners to improve teacher quality as well as boost literacy and numeracy levels need to be promoted. For example, local governments could allocate budget funds to collaborate and replicate a model of an INOVASI project in other schools.
- 2. The cost-effectiveness of education policy in four districts needs to be analysed to identify potential sources of additional funding (or a reallocation of the existing education budget) for the quality aspects of education. Advocating local governments to increase their Original Local Government Revenue allocations for education would increase budget allocations for quality aspects of education. INOVASI continues to advocate all local governments to allocate funds to support teachers and principals' working groups as learning forums. East Sumba's initiative to allocate regional schools operational funds (BOSDA) is another practice to be promoted in other districts.
- 3. INOVASI can also help strengthen the various roles of district education office staff:
 - implementing external and internal education quality assurance to monitor indicators of education quality according to the national standards. This includes the regional government education offices and school supervisors strengthening the monitoring system for education processes in schools;
 - · developing programs that focus on improving education quality; and
 - strengthening the monitoring process for recruiting local contract teachers by setting up the minimum requirements that comply with the Law on teachers.
- 4. Initiating a customary law to reduce the impact of expensive cultural ceremonies and child labour practices on education quality, as well as improving parental and community support for children's education.

In general, four pilot projects that INOVASI initiated in four districts in Sumba, correspond to the local governments' focus on improving teacher quality by strengthening teachers' working groups and improving foundational literacy and numeracy among students in grades one to three. The findings in this baseline study have also created government interest in developing curriculum to improve foundational literacy and numeracy, with respect to a local language being used as the second language for classroom instruction to overcome the language barrier in some areas.

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