

# Infrastructure, Poverty and Jobs

Introducing Local Resource-based Strategies to Eastern Indonesia  
(Papua, Maluku and NTT)



**Employment Intensive Investment Programme  
ILO Jakarta**

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# Introduction

The ILO has for several years provided policy advice to the Government of Indonesia, in relation to promoting local resource-based approaches in rural infrastructure development programmes<sup>1</sup>. It has provided technical advisory support and developed a series of guidelines promoting the use of local resource-based methods in the development and maintenance of rural infrastructure. In order to further promote the local resource-based strategy at local level, it is recognized that closer collaboration is required with local authorities in order to make use of the tools developed<sup>2</sup>. For this purpose, the ILO carried out a comprehensive study on how the local resource-based principles and tools can most effectively be incorporated into the rural infrastructure development programmes in selected provinces of Indonesia.

Taking note of the decentralised responsibility for the provision and maintenance of rural infrastructure to local government authorities, this study

- made a comprehensive review of ongoing rural infrastructure investment programmes and current development objectives and goals;
- reviewed the employment generation and community involvement measures already in place in existing rural development programmes;
- established an overview of the main actors involved in its implementation;
- consulted with planning and implementation authorities at provincial and district levels to establish a comprehensive understanding of the challenges facing the sector;
- compiled reports containing sector reviews, findings and recommendations on which further discussions could be held to formulate possible technical collaboration.

The main purpose of the work was to identify possible areas for collaboration between local authorities and the ILO for improving the delivery of rural infrastructure through local-resource based approaches including the use of employment-intensive works technology, private sector involvement and rural access planning.

The work provided an analysis of the current situation in terms of access to basic services and markets in the rural areas in the three provinces and on this basis made projections on rural transport infrastructure development demands, assessed implementation capacity, evaluated some key challenges facing the sector and identified entry points for a possible ILO technical cooperation programme.

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<sup>1</sup> The ILO has been running an international programme on infrastructure development and local resource-based methods for over 30 years. This programme has developed different strategies and a number of procedures and tools to increase the impact of investments in infrastructure on employment creation, poverty reduction and local development. The programme works with governments, the private sector and communities in orienting infrastructure investments towards the creation of more productive employment and towards the improvement of access to basic goods and services for the poor. A combined use of local participation in planning with the utilization of locally available labour, skills, technology, materials, and appropriate work methods has proven to be an effective and economically viable approach to infrastructure works in developing countries. In terms of implementation of infrastructure works, the ILO is perhaps best known for guidance on works organization and the efficient and technically competent use of labour-based approaches, as well as their combination with locally available materials and equipment. This knowledge and approach has been successfully applied in more than ten countries in the Asian region including Indonesia, and together with appropriate planning methods, designs and maintenance, provides an alternative approach to infrastructure development.

<sup>2</sup> These tools include country specific guidelines on IRAP, local contracting, labour-based works technology and rural road maintenance.

This process was coordinated with key stakeholders already involved in rural infrastructure development and maintenance in the selected provinces including relevant ministries and agencies as well as related efforts carried out by donors and the international development banks.

A team of international and local consultants implemented the activities in the three provinces. This report summarizes their main findings and conclusions.

## **Papua**

Martin Sergeant prepared the report on Papua province. Two visits were made to the province. The first was, 1 to 11 November 2007, and the second was 24 January to 2 February 2008. Roberto Akyuwan accompanied Martin on the first visit and Tauwik Mohammed on the second.

The findings of the Papua mission arose out discussions with government officials, representatives of development organisations and other relevant parties supplemented by reference to reports, evaluations and other documentation.

Preliminary findings were discussed at a seminar with officials and other stakeholders on 31 January 2008 in Jayapura. Ten people attended as well as ILO staff and a good discussion took place.

## **Maluku**

A mission composed of consultants Kaj Thorndahl and Roberto Akyuwen assisted by Freddy Rumlatu visited Maluku 22 November to 1 December 2007, met officials and made field visits to rural infrastructure on the islands of Ambon, Haruku and Seram. The mission was well received by the provincial authorities, who facilitated the visit, exchanged opinions and supplied information.

A workshop on 30 November concluded the visit and resulted in a consensus for further collaboration.

## **NTT**

A mission composed of Mike Shone, Krishna Pribadi and Febriyanti Maulina visited NTT from 22 November until 4 December 2007 to implement the activities. The mission programme involved participation in the Joint GOI/UN Agencies workshop developing a Joint Programme for Poverty reduction in Belu District in NTT. The Mission made a presentation to the GOI/UN workshop on local resource-based approaches in the context of a poverty reduction programme. The mission also facilitated a Provincial workshop on December 3 on the mission findings and this was held in Kupang under the chairmanship of BAPPEDA.

## **Jakarta**

At the conclusion of the three missions the ILO convened a mini "Way Forward" meeting of stakeholders in Jakarta on December 7 to review and discuss the findings of the mission teams who went to the different provinces.

## Abbreviations

ADB	Asian Development Bank
ANTARA	Assistance for Regional Autonomy, NTT
APBN	Anggaran Pendapatan dan Belanja Negara State Budget of Expenditure & Revenues
APBD	Annual Development Plan
AusAID	Australian Agency for International Development
ASIST - AP	Advisory Support Information Services and Training in the Asia-Pacific region (ILO project)
BAPPEDA	Provincial/District Planning Agency
BAPPENAS	National Development Planning Agency
BPMD	Village Community Empowerment Agency
BPS	Bureau of Statistics
CSO	Civil Society Organisation
DPW/PU	Department of Public Works
EI	Employment Intensive
EU	European Union
GOI	Government of Indonesia
HH	Households
ILO	International Labour Organization
IRAP	Integrated Rural Accessibility Planning
KDP	Kecamatan Development Programme
Kimpraswil	Public Works
KM	Kilometre
LBEST	Labour-based, equipment-supported technology
LBT	Labour based technology
LI	Labour intensive
LPJKD	Lembaga Pengembangan Jasa Konstruksi Construction Services Development Board
LRB	Local resource based
M	Metre
MEBT	Modified equipment-based technology
MDG	Millennium Development Goals
MTDP	Medium Term Development Plan
NGO	Non Governmental Organization
NTT	Nusa Tenggara Timur
OSH	Occupational Safety and Health
PIF	Papua in Figures
PNA	Papua Needs Assessment
PNPM	National Community Empowerment Program
PIIP	Rural Infrastructure Improvement Programme
PRSP/SNPk	Poverty Reduction Strategy Paper (GOI)
PU	Public Works Department
RESPEK	Rencana Strategis Pembangunan Kampung
RENSTRA	Kabupaten Kupang Government Strategic Plan
RJMD	Medium-term Development Plan
RPJPD	Long-term Development Plan
Rp	Indonesian Rupiah
SoFEI	Support Office for Eastern Indonesia
TA	Technical Assistance
ToR	Terms of Reference
TTS	Timor Tengah Selatan

UNDP	United Nations Development Programme
USD	United States Dollar
USD/Rp	9400/USD (Dec 2007)

# 1. Papua Province

## 1.1 Introduction

The region of Papua is Indonesia's, easternmost, largest<sup>3</sup> and most sparsely populated<sup>4</sup> region. Ever since its integration into Indonesia in 1969, Papua has been troubled by separatist movements and social unrest. Following Indonesia's transition towards democracy and decentralization in the late 1990s, the Special Autonomy Law for Papua was passed in 2001. This was aimed at solving the ongoing conflict and accelerating the economic development of the region.

There are 19 kabupaten and 1 municipality (kota) in Papua province. These 20 kabupaten/kota are subdivided into 283 sub districts (kecamatan) and 2,442 villages (kampong). In revenue terms, Papua is one of the wealthiest provinces in Indonesia, with substantial income from mining (55.12% of regional income) and from forestry (5.3%). Yet it also suffers from the highest rates of per capita poverty in Indonesia – with over 80% of the households living below the poverty line. Much of this poverty is concentrated in remote rural areas. Institutions for service delivery at a local level remain chronically under-resourced. A third of Papuan children do not go to school. Nine out of ten villages do not have a health centre, doctor or midwife. Infant mortality is significantly above the national average (56 as opposed to 35 per 1000) and the province suffers from the highest per capita rates of HIV/AIDS in Indonesia.

Progress in Indonesia towards achievement of the millennium development goals (MDGs) is encouraging. The Government of Indonesia's (Gol) 2005 report on the MDGs is generally optimistic. The report does demonstrate, however, that progress is uneven amongst the country's provinces and that Papua province presents a particular challenge for achieving the MDGs.

Papua province has experienced significant economic growth over the last three decades. Surprisingly official statistics shows that the poverty level in the province has increased at the same time. Even within Papua itself there is considerable variation between districts at the coast close to economic centres and those in the centre of the country without road access.

UNDP, in collaboration with central and local government, have undertaken a Papua Needs Assessment<sup>5</sup> (PNA) to develop a deeper understanding of the situation in Papua. The assessment looked at: 1) local government capacities (2) civil society and community-based organizations' activities, 3) community conditions and livelihoods needs, 4) gender, the environment, governance and public finance.

The PNA showed major gaps between urban, rural and remote areas in their access to basic services and economic opportunities. Major differences between the majority indigenous population, and migrant populations, were also identified.

The assessment confirmed that there are capable NGOs and others working on basic MDGs-related issues in rural areas in Papua and West Papua. Poor data collection, analysis and reporting, policy preparation, planning, programme implementation were problems at all

<sup>3</sup> Total area of Papua is 309,934.40 sq km, equal to 16.66 percent of Indonesia.

<sup>4</sup> The total population of Papua Province in 2005 was 2.52 millions living in 709,000 households. This represents 1.15 percent of national population (219.21 millions). The population density of Papua Province in 2005 was 7 persons per sq km.

<sup>5</sup> Papua Needs Assessment An Overview of Findings and Implications for the Programming of Development Assistance UNDP 2005

levels of government. This was underlined by the fact that the figures for roads in “Papua in Figures” 2006 (PIF)<sup>6</sup> were themselves incomplete.

The total labour force (economically active) of Papua province in 2005 was 1.3 million. This represents 78.25 percent of the total working age population in the province (1.66 million). The growth of the labour force has exceeded working opportunities and this has, in turn, lowered the employment opportunity rate. The number of unemployed in the same period was 92,778, which includes 76,618 who have never worked.

## Policy

The Special Autonomy Law (21/2001) was passed on 2001 and was intended to give Papua the capacity to identify its own development and other needs, and to implement programmes accordingly. This is intended, in turn, to provide the opportunity to accelerate development in the province including better progress towards the MDGs. It is the intention that people-centered, locally driven and participatory bottom-up planning will contribute to sustainable development in both provinces of Papua (Papua and West Papua).

Laws 17/2003 on State Finance and 25/2004 on National Planning spell out new procedures for long-term, medium-term and annual planning and budgeting. Kabupaten and sectoral agencies are required to prepare integrated, cross-sectoral medium-term and annual plans and budgets to support development in the communities in their administrative areas. Although sectoral agencies and planners in Papua and West Papua have limited practical experience in collaborating with one another, this new ruling provides an important opportunity to achieve better-integrated service delivery plans and to raise public political participation at the district level.

The first directly elected governor of Papua took up his post in 2006. He has said that he wishes to see government in the province transformed from top down to bottom up community based planning. He is leading the development of a new strategic programme for community-based village development (RESPEK), focusing on nutrition, education, health, and village infrastructure. RESPEK constitutes one of four development priorities for a New Papua<sup>7</sup> alongside:

- Strengthened macro-infrastructure with careful consideration of the local context in Papua (cultural, economic, affordability, and environment). (RESPIM)
- Improved governance through comprehensive reform package based around bureaucracy reform, budgetary reform, and independent procurement system, focusing on building individual and organizational capacities.
- Sustainable natural resource management.

## Access to Health, Education, Water and Markets

Nine out of ten villages do not have a health centre, doctor or midwife. Infant mortality is significantly above the national average (56 as opposed to 35 per 1000) and the maternal mortality rate is 1,116 per 100,000 births, which is the highest in Indonesia. The province also suffers from the highest per capita rates of HIV/AIDS in Indonesia. Access to health support is thus significantly below the average for Indonesia as a whole.

<sup>6</sup> Papua Dalam Angka – Papua in Figures 2006

<sup>7</sup> For details, see the policy and strategy paper by the Governor of Papua, (2007) *Papua Baru – Gagasan-Gagasan Strategis Gubernur untuk Kehidupan Rakyat yang Lebih Adil, Lebih Demokratis, Lebih Damai, dan Lebih Sejahtera di Provinsi Papua*



The government has attempted to improve access to health services by providing mobile community health centres. The effect of the lack of rural access on these facilities is shown

	Population	Roads <sup>8</sup>
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in the PNA:

*“The majority of mobile community health centres or Puskesmas (four wheel drive vehicles/small water-craft) cover districts (kecamatan) where transport and communication conditions are treacherous. Thus many remote areas do not have enough access to these health centers because of the expensive fuel costs required to reach remote areas. Some remote areas can only be reached by motor bikes and reaching those areas in the wet season makes the cost of health services very expensive. The situation is aggravated by the scattered populations of very small villages, for example Waropko District which has a total population of 2,980 people spread over 16 villages.”*

As noted above, a third of Papuan children do not go to school. PIF does not give figures for the percentage of children completing primary school. In the PNA amongst the reasons given for children dropping out of school is the distance from the village.

Neither PIF nor the PNA have data on access to safe water and sanitation for the province although the latter does comment that both of them are a factor in poor health. PIF does record that there are 10 “water supply establishments”. As noted elsewhere many interlocutors described clean water as a major need and said that “most” villages did not have it. When asked for examples of local infrastructure that kampongs would prioritise, most interlocutors said “water” first.

Data from PIF indicates that there is considerable variation between kabupaten and between different areas within the kabupaten. The PNA also notes significant variations between the indigenous inhabitants and transmigrants.

There is no information in PIF on access to markets in the rural areas. Given that a market facility can be established very simply the principle infrastructural problem in ensuring that the poor and remote areas can enter the market economy is lack of adequate transport for goods.

## Rural Access

Whilst Rural Access is not included in the MDGs as an indicator, remoteness has its inevitable effect on many villages access to services including health and education as shown in the PNA references above.

There is no single provincial network of roads in Papua province. There are instead a series of isolated clusters of roads around economic centres. Communication between them is by sea or air. Or simply by walking! All but one of these clusters are on the coast: Wamena is in the mountainous centre of the province. The road linking Wamena to Jayapura has been nominally under construction for over ten years but has yet to be completed.

Kabupaten	Area square kilometers	Population	Pop Density	Job Seekers	State	Province	Kabupaten	Total	Density km/1000 sq km
1 Merauke	43,979	155,783	3.54	8,642	605	243	1,330	2,178	50
2 Jayawijaya	12,680	210,654	16.61	2,003	269	62	1,693	2,024	160
3 Jayapura	15,309	91,990	6.01	14,284	-	-	385	385	25
4 Paniani	14,215	112,881	7.94	457	-	-	1,173	1,173	83
5 Puncak	10,852	111,711	10.29	4,796	-	-	1,439	1,439	133

	Jaya									
6	Nabire	16,312	161,519	9.90	5,542	314	40	998	1,352	83
7	Mimika	20,040	126,430	6.31	16,953	-	39	633	672	34
8	Yapon Waropen	3,131	70,744	22.59	2,647	53	161	1,326	1,540	492
9	Biak Numfor	2,360	99,798	42.29	1,925	35	238	738	1,011	428
10	Boven Digoel	28,471	31,443	1.10	-	-	-	403	403	14
11	Mappi	27,632	66,228	2.40	-	-	-	694	694	25
12	Asmat	18,976	62,002	3.27	-	-	-	-	-	-
13	Yahukimo	15,771	137,260	8.70	-	-	-	-	-	-
14	Pegunungan Bintang	16,908	88,529	5.24	-	-	-	-	-	-
15	Tolikara	8,816	44,180	5.01	-	-	-	-	-	-
16	Sarmi	25,902	31,593	1.22	-	-	-	145	145	6
17	Keerom	9,365	37,927	4.05	1,540	-	-	577	577	62
18	Waropen	24,628	21,647	0.88	-	-	-	-	-	-
19	Supiori	775	12,709	16.40	-	-	-	-	-	-
	Kota									
71	Kota Jayapura	940	200,360	213.15	21,411	519	618	598	1,735	1,846

Table 1.1 Roads and Population in Papua Province

Data on road lengths in PIF and that provided in a road inventory by BAPPEDA is conflicting. (Showing again the difficulty of obtaining useful data in Papua and reflecting the conclusions of the PNA). Table 1 above shows the lengths of roads in each kabupaten in Papua province taken from the BAPPEDA road inventory. They do not include short lengths of village road built by communities who are then responsible for maintenance.

The table confirms the exceptionally low level of road infrastructure in Papua province. Some of the kabupaten appear to be without any formal road network at all. The situation is worse than it appears at first as the inventory also gives data on the condition of the roads.

Table 2 below is abstracted from that inventory and shows road condition in the two provinces of Papua and West Papua. The gravel and earth roads are almost all in rural area connecting villages with each other and with the road network. It is worrying that 54% of earth roads and 39% of gravel roads are shown to be heavily damaged and only a small proportion are in good condition.

Table 1.2 Road Condition 2006 Papua and West Papua

Road Type	Length (km)	Good %	Heavy Damage %
Asphalt	5,631	51	14
Gravel	7,390	29	39
Earth	7,838	22	54

### Planning Process Applied at Local Level

The implementation of the Special Autonomy Law 21/2001 in Papua is intended to provide the opportunity of accelerating development in Papua and improving progress towards the MDGs. People-centered, locally driven and participatory bottom-up planning is to contribute

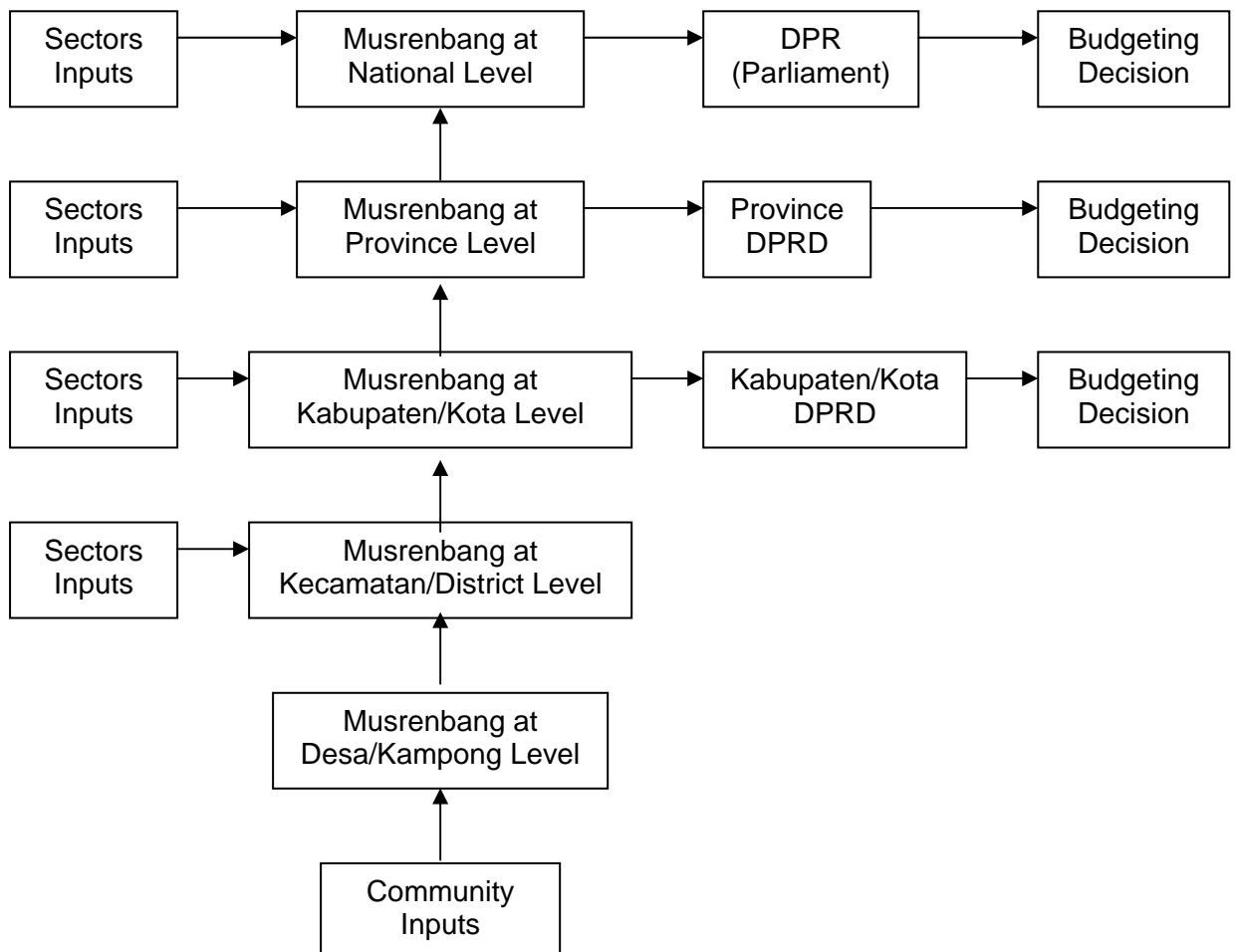
to sustainable development in both provinces of Papua. Laws 17/2003 on state finance and 25/2004 on national planning spell out new procedures for long-term, medium-term and annual planning and budgeting.

Kabupaten and sectoral agencies (dinas) are required to prepare integrated, cross-sectoral medium-term and annual plans and budgets to support development in the communities in their administrative areas. Although sectoral agencies and planners in Papua have limited practical experience in collaborating with one another, this new ruling should provide an important opportunity to achieve better-integrated service delivery plans and to raise public participation at the district level.

The situation in Kabupaten Jayapura was discussed with the BAPPEDA Secretary. He described the process set out in the flow chart below. In response to the above laws medium term development planning is undertaken at Musrenbangs which are annual development forums at kampong and kecamatan level. These meetings consider proposals and prioritise them, making funding available or recommendations to the next higher level when appropriate.

The Secretary admitted that many of these planning processes were very new and there was limited capacity to implement them effectively. Because of “limited socialization”, many of procedures stated in these documents could not be implemented until recently. He also commented that no user friendly planning instruments had been provided to them, including through the KDP.

Figure 1.1 Current Planning Process in Papua Province



Whilst the above represents the theoretical approach to planning the reality appears to be different. A very worrying impression is given in the PNA of the current state of the planning process.

The UN representative in Papua noted a resistance to the setting of quantified targets in the province and commented that efforts to obtain figures from interlocutors in government on ongoing and future programmes were extremely difficult or impossible.

The Provincial Secretary explained that government lacked data on MDGs and other issues in Papua. The setting of interim targets and goals was thus impossible. To overcome this, the province is commissioning a major statistical exercise from the Indonesian central bureau of statistics in 2008 after which it will be better placed to prepare such targets.

In most countries and districts the percentage of people with access to safe drinking water is known to everyone working in development. In Papua province no one seemed to know it. It is too early to judge progress on the water programme for example but there are no intermediate targets. People could only say that “most” villages lacked clean water.

The target for provincial roads is to link each of the kabupaten headquarters by road in the next 25 years. There were no intermediate targets. The road study proposed for AusAid funding should introduce some realistic costed targets.

The PNA commented that collaboration between various levels of government and CSOs on service delivery is minimal. Government and CSOs have shown increasing willingness to share, learn, cooperate in service delivery but do not have much prior experience on how to do this. Workshops and seminars succeed in bringing people together to exchange of information and views but this has not yet led to a significant effect.

The PNA also commented that there is limited effort to monitor, evaluate, share, and apply lessons for improved policies and practice; examples of what works where and why are not being replicated.

The PNA further commented that most of the government-funded infrastructure that Papuan villagers see has been built by external contractors with minimal genuine local involvement. Some individuals within government expressed enthusiasm for labour based approaches and its ability to provide work for the poorest. It has not, however, been mainstreamed into government practice. Most government work is carried out by contractor and no effort is made to maximize the use of labour. There are no figures available to indicate the levels of employment but use of formal LRB methods by at least the smaller contractors and an enabling environment in contract letting would substantially increase their participation and ability to operate.

## **Funding**

The provincial government receives funding from the national public works budget for provincial level infrastructure. Decisions taken at provincial level on prioritization of the works required and contractors are used for implementation,

Kabupaten receive special allocation funding (DAK) from the national public works budget to spend on the construction of infrastructure. This is nominally for infrastructure work above kampong level. Again decisions on prioritization are taken at kabupaten level. The work is undertaken directly by the kabupaten or through consultants and contractors.

Kabupaten can, if they have the funds and so wish, provide funds or undertake work at kampong level. In Kabupaten Jayapura, for example, the kabupaten provides funds to each village through a kampong allocation fund (ADK). This is a minimum of Rps 100 million per

village and averages about Rps 160 million in the more remote areas. It is not clear to what extent this practice is reflected in other kabupaten areas. Funds for smaller projects are said to be given to the kampung themselves although larger programmes are undertaken by the kabupaten itself. The kabupaten is intending to provide technical support through facilitators at kecamatan level and asked for support for this from ILO.

Until this year all kecamatan in Papua received Rps 250 million a year directly for infrastructure from the national budget which would be used for village level infrastructure in the 5-7 kampongs in their area. This stopped following the start of RESPEK and was separate from KDP funding described later.

The PNA commented that

*Most of the government-funded infrastructure that Papuan villagers see has been built by external contractors with minimal genuine local involvement. Thus, the existing infrastructure in villages is subsequently rarely well maintained and in many cases it is not used. Contracting of communities for infrastructure development, with contractors used only for technical assistance to the communities, has not been part of government policy or practice to date. Having not been involved in its development, local people tend not to feel ownership of basic infrastructure that the Government constructs. There are, however, other community assets that people construct, maintain, and use, including communal and adat houses, canoes, wells, and piers. Community built infrastructure such as roads or schools is rare, but where it exists its upkeep tends to be better.*

### **Kecamatan Development Program**

PNPM the government's national programme for community empowerment has two components. Kecamatan Development Program (KDP) which operates in rural areas and UPP in urban areas.

The KDP is a national Government of Indonesia program, implemented by the Ministry of Home Affairs, Community Development Office aimed at alleviating poverty, strengthening local government and community institutions, and improving local governance. KDP began in 1998 at a time of tremendous political upheaval and financial crisis. Currently, KDP is in its third phase, and is expected to run until 2009.

KDP is funded through government budget allocations, donor grants, and loans from the World Bank. It provides block grants of approximately Rps. 500 million to 1.5 billion (approximately US\$50,000 to US\$150,000) to kecamatan depending upon population size. Kampongs then receive approximately Rp 100 million to spend on development activities. The activities are identified in participatory planning and decision-making processes to allocate those resources for their self-defined development needs and priorities. In theory KDP focuses on Indonesia's poorest rural communities although in Kabupaten Jayapura it was only working in the more accessible half of the kabupaten.

KDP is working in a number of provinces in Indonesia. It is an "open menu" programme and villages are able to propose any form of infrastructure including buildings, roads, water and even electricity. Facilitators work with the villagers helping them to identify their needs according to set guidelines.

In Papua after Jan 2008, KDP was replaced by RESPEK a programme of the Papua provincial government. World Bank funds will continue to be used for RESPEK and particularly for technical assistance to the programme. The planning tools used in KDP are to be used as the basis for the new programme.

The most recent evaluation available for the KDP is dated March 2006.<sup>9</sup> Papua province is not mentioned specifically in the evaluation. The project was marked as being “moderately satisfactory”. Amongst the six “lessons learnt” are the following.

- The extent of project management intervention at community level needs to support targets for achieving poverty and gender objectives. Too much of a hands-off approach by project management at the community level on issues of poverty and gender may insufficiently challenge the status quo.
- Maintenance of infrastructure should be an integral part of any infrastructure construction intervention. A maintenance strategy should be developed that addresses the total community infrastructure challenge not simply that of the project portions. The assessed feasibility of sustaining maintenance at the community level should be reflected back into investment decisions on the funding of new infrastructure.

KDP has been operating in Papua since 1998. In that time it has operated in all 19 rural kabupaten. It has built a wide range of infrastructure including up to 100 roads of various types. The longest road is 3 km but many are only 100 – 300 m long especially in the villages themselves. Since many villages are far from the road network they are unlikely to choose roads as there will be no benefit in terms of improved access. Foot bridges and paths have been provided in such areas when the communities have prioritised them.

A visit was made to four projects very close to the KDP office. These were a clinic, two short concrete surfaced roads (one little more than a short narrow path), and a pair of ferryboat jetties. As with all KDP projects the local people had identified their needs, the project had provided materials, funds for labour and some advice. All had been completed in 2006. The concrete on the shortest road had clearly been mixed wrongly and was deteriorating quickly. The larger road looked stronger but in one place a truck turning off had broken it and there was a dispute over who should repair it. One of the jetties was already beginning to sag as a supporting pole sank into the seabed. The “clinic” had no medical equipment in it and was being used to cook food. A doctor and nurse were said to visit twice a month. The fact that these were the closest programmes to the KDP headquarters gives little confidence that projects in remote areas are being built effectively. The ILO team was told that an international consultant engineer funded by the World Bank would be assessing the quality of the programme.

Maintenance is nominally the responsibility of the villages and the KDP team said that training in maintenance was given to the villages. In the event that maintenance is required beyond capacity of the village a maintenance team from the kecamatan is said to be available. The Head of the PDM in Kabupaten Jayapura who is responsible for the programme commented, however, that little or no training in maintenance was given in practice. He also said that the programme had decided only to work in the two of the four “development regions” in the kabupaten – working only in the more accessible areas!

Given the wide scope of the “open menu” there must be a question over the sustainability of the completed facilities.

## **RESPEK**

In response to the challenges facing his province, the first directly elected governor of Papua is leading the development of a new strategic programme for community-based village development (RESPEK - Rencana Strategis Pembangunan Kampung.), focusing on nutrition, education, health, and village infrastructure. RESPEK constitutes one of four development priorities for a New Papua<sup>10</sup>.

Through provision of block grants to village administrations, RESPEK is intended to be a radical step forward for community-led development programming, building on parallel investments in infrastructure, bureaucracy reform and sustainable natural resource management.

RESPEK is intended to synchronize the block grant funds, both between sectors and other sources of fund including the Corporate Social Responsibility fund which is provided by the Freeport mine should be included in the RESPEK scheme.

Recently, UNDP together with BPMD, BAPPEDA and a range of Papua-based donor agencies, prepared a strategic plan for RESPEK. Financial and technical assistance to produce a comprehensive policy document was provided by UNDP, Papua. It is intended that the RESPEK policy document will serve as a guideline for implementing the village development programme in Papua and West Papua. In addition, UNDP is assisting in the preparation and delivery of a public information campaign including posters and pictorial stories for socializing and disseminating the RESPEK program at the village level.

There are concerns amongst donors that RESPEK does not reflect an understanding of what is needed to promote pro-poor policy and growth. Strategic guidance is also needed on the potential gaps and synergies between the approach taken by RESPEK, and parallel investments in large-scale infrastructure development and land conversion for agro-industry. As with KDP, activities aim at allowing villagers to make their own choices about the kinds of projects that they need and want. KDP World Bank funding is being used to provide training for development facilitators who assist kampongs. The issues raised in the evaluations on the KDP's own programme (see above) suggest that there should be no complacency as to the adequacy of the training and approach.

There is considerable enthusiasm for RESPEK but progress towards implementation has not been rapid. Funding was distributed in August 2007 but in November 2007 kabupaten had only recently received a formal letter telling them that the programme is starting and they have received no guidelines or detailed information on the programme. Training programmes for facilitators has not yet been completed and it seems likely that the programme will take some time to get underway.

The RESPEK process involves province and kampongs with support to be provided at kecamatan level. Kabupaten are out of the process and Kabupaten Jayapura clearly saw its own ADK programme as being in competition with RESPEK; intending to set up parallel support at kecamatan level. This does little to convince the outsider that there will be sensible coordination between the programmes.

## **RESPIM**

RESPIM (Membangun Papua Baru) is the key government infrastructure program which has a focus on economic infrastructure in six priority development regions. These regions have been selected based on their potential for agricultural, mining and tourism development. Priority regions are Jayapura-Lereh, Mamberamo, Teluk Cenderwasih-Biak, Kawasan Pantai Selatan Timika-Dekai, Mappi-Asiki Boven Digul-Merauke and Pegunungan Tengah Papua.

In many areas investment in betterment of existing infrastructure and construction of new infrastructure can be justified on current production and expected future growth as well as the economic benefits which result from improvements in indicators such as cost of transport of essential materials, market access (which requires integrated road and shipping networks to provide effective transport of products to markets), and access to a reliable workforce.

However development of regions where future mining and agricultural development is planned requires provision of significant new infrastructure, new urban areas, electricity and telecommunications investment but is more risky as it is based on projected and consequently higher risk economic activity.

Regional infrastructure investment totalling over US\$ 8 billion has been identified and includes roads, airports, seaports, water supply, hydro electric developments, irrigation systems and urban infrastructure.

Planning and coordination of development in all these diverse regions is a key challenge for the Government of Papua. Implementation of infrastructure requires careful planning and implementation by the Papua Government to ensure that services planned are integrated with a broader provincial development plan and in line with economic opportunities. Development planning for each region also has to be flexible so that as market opportunities changes the priority of infrastructure development may also need to change.

### **Stakeholders - Government**

National and provincial roads are a key part of the overall rural network. National roads are funded from Gol funds and there is a division of national Bina Marga in Papua that manages national roads.

Rps 150 billion has been spent on new provincial roads each year since 2002 in accordance with the governor's strategic plan which is reviewed annually. The two major new projects the department tried to get funding for this year were the road to Wamena and the Jayapura Ring Road. They were unsuccessful. Provincial Bina Marga does expect to receive 600 billion Rps for road maintenance but admitted that it was insufficient to maintain the roads in their current condition. All work including maintenance is carried out by contractors and, as usual in Papua contracts less than 1 billion Rps (\$110,000) are reserved for local contractors.

Roads and other infrastructure below provincial level are the responsibility of the Kabupaten.

Provincial Cipta Karya, the sub-department responsible for water supply began a programme for clean water in 2007 that is spending Rps 20 billion each year. The programme worked in 1 kabupaten and 15 kampongs in 2007 and is intended to continue indefinitely. The programme does not include sanitation.

Irrigation is the responsibility of Irrigasi department in the provincial public works. The department is responsible for schemes in 8 kabupaten in Papua and West Papua. The biggest schemes were in Nabire and Merauke and all their beneficiaries were transmigrant farmers. There were plans to start schemes in the inland Kabupaten of Wamena and Seroi. Almost all schemes remained the responsibility of the province. The only kabupaten with its own scheme was Keeroi.

Irrigation water is provided free to farmers who maintain their own village level channels through farmer water use committees. Indigenous farmers generally lack the skills to use irrigation effectively! Irrigasi was planning to provide them with water for fish farming including in Wamena and expected that some of the work would be let in smaller contracts suitable for small contractors.

### **International Agencies**

Support to village level infrastructure is provided almost entirely through the UNDP joint team including the KDP. There are many national and international NGOs working in Papua including a large number of faith based groups.



There are no major infrastructure investment programmes currently funded by World Bank, ADB or other donors. The World Bank funded Eastern Indonesia Transport Project undertook “betterment” and periodic maintenance of a number of kabupaten and provincial roads between 2002 and 2006. It also had a significant institutional component. Referring however to this component the project completion report<sup>11</sup> stated:

*The achievement of the third objective, namely to improve the use of scarce financial and natural resources, is rated moderately unsatisfactory. Increased efficiency, quality, and transparency in award of works have been only partially achieved. Some technical assistance activities were not completed, such as the technical audits or the establishment of a Road Fund and a Road Board. However, the final outcome on the treatment of allegations of bribery and other anticorruption actions as part of the Project has been generally positive and is worth highlighting.*

It is not clear to what extent institutional strengthening focused on Papua province or if there was any discernible impact there.

The provincial government has invited international donors to provide support to RESPIM. AusAid is being encouraged by Gol to work in Papua. An infrastructure adviser visited early in 2007 and the province may be part of a national road study being undertaken by AusAid. A short to medium term pre-feasibility review of proposed priority road development corridors in Papua is also being proposed. Even in the longer term technical assistance rather than capital investment is envisaged. Attempts to meet AusAid and the World Bank transport sector specialist in Jakarta to clarify the situation were unsuccessful.

### **Private Sector**

Under the existing KDP the role of the private sector is limited to low level consultancy inputs to design and supervision. The private sector also supplies materials purchased for the programme. All construction work is done by the communities.

On larger scale infrastructure the private sector in the form of consultants and contractors are used almost exclusively for both maintenance and construction. The Kabupaten do have some local construction plant.

## **1.2 Identify Capacity Constraints and other Challenges**

As noted earlier, progress in Indonesia towards achievement of the millennium development goals (MDGs) is encouraging. The Government of Indonesia’s 2005 report on the MDGs is generally optimistic. The report shows that progress is uneven amongst the country’s provinces and that Papua Province presents a particular challenge for achieving the MDGs.

Goal setting is the responsibility of the provincial government although the UN representative in Papua noted a resistance to the setting of quantified targets in the province. When coupled with the lack of reliable data in the province this makes it difficult to establish what is being achieved and where the black spots may be. The Provincial Secretary explained that government lacked the data on MDGs in Papua etc and that the setting of interim targets and goals was impossible. The province is commissioning a major statistical exercise from the Indonesian central bureau of statistics in 2008.

## Local Participation in the Planning Process

The secretary of BAPPEDA admitted that many of the planning processes were very new and there was limited capacity to implement them effectively. Whilst official policy requires bottom up participation practice as set out in the PNA is not encouraging.

A very downbeat picture of local planning capacity was painted in the PNA which commented that with disjointed administrative bodies at varying levels and often low capacity or experience in planning, many would-be useful resources are not used as efficiently as they could be. Planning capacity of all levels of government is low, and most of the new kabupaten do not have development plans.

The PNA commented that in 17 of the 19 kabupaten, the official bottom-up planning process has ceased to be practiced in most villages. The old structures of village government have been replaced by new structures (BAPERKAM or 'village development planning body') but this is, in most cases, a change of name rather than a change of procedures as most BAPERKAM are inactive.

The PNA further commented that lack of coordination between development strategies and plans with annual budgeting may be one of the primary reasons for the failures in achieving local development objectives.

The PNA commented that allocations for development activities are, in many cases, made on the Bupati's (kabupaten head) instructions in an ad hoc fashion, rather than based on a technocratic interpretation of established development plans. Sectoral plans are seldom prepared in consultation with stakeholders at provincial and city / kabupaten levels and are not used directly as the basis for fund allocations and in implementing development activities.' Planning and budgeting systems are often not synchronized. Subsidies from the province to city / kabupaten governments to support the achievement of common strategic or policy goals are also rare, as there is a strong preference for bureaucracies to claim credit for their own projects.

The PNA also commented that a focus on delivering short term, time bound 'projects' dominates the thinking and activities of civil servants at all levels of government in Papua. This is as opposed to longer-term, holistic thinking about what development means or how it should be measured.

The PNA summarized its section on planning by commenting that, local government planning is one of the primary weaknesses of governance in Papua and that this is made worse by a failure to ensure the active participation of civil society and the private sector. There is no evidence that this has improved since 2005.

The RESPEK programme commits government to bottom up planning and public participation in the planning process. This is welcome but turning it into something that is practical will be difficult. The parallel RESPIM programme identifies major infrastructure that needs to be built. Planning of this is taking place in BAPPEDA with the help of a UNDP adviser.

Whilst a community may wish for a road and be willing to choose it as their first priority for their limited funds; it will be of little practical use if there is no kabupaten or provincial road to link it to a wider network. Community commitments to maintain rural roads can also be strained if they are used excessively by people from other communities travelling to the network.

There must therefore be an effective planning process for rural transport and other rural infrastructure at both kabupaten and provincial level to ensure that kabupaten and provincial roads are planned effectively and built.

### **Implementation Constraints**

Funding is always an issue in developing countries. The semi-autonomous status of Papua means that it can draw on significant levels of funding from central government and its own resources. Funding is not, therefore, the only problem although allocations for important but low profile issues such as road maintenance are low and more effective planning would ensure better expenditure.

The topography of Papua is a major constraint to improving rural access and this is reflected in the lack of a province wide road network. Construction of all roads is expensive and maintenance in a monsoon climate is especially difficult.

A convincing assessment of the main implementation constraints must rely on data setting out the current situation. The lack of such information is in itself a major constraint. The PNA draws attention to this in a way that gives a convincing impression of the lack of capacity:

*Within the broader assessment of governance, the relevance of focusing on the capacity of all development actors in Papua has been highlighted. The assessment of needs and capacities generally is constrained by the limited capacity amongst government and civil society to collect, analyse and use data, and to manage and assure quality of consultancies and project activities.*

*The importance of improving data-related capacities amongst province, kabupaten and Kecamatan government agency personnel cannot be overstated. Local assessments of needs and capacities conducted by local university and NGO partners as part of the PNA focused overwhelmingly on what is lacking and what has failed. Difficulties in identifying and analysing the capacities that do exist, what does work and why, and what can be developed further suggest that issues of low confidence and self-esteem affect local perceptions of what is possible and how Papua could develop. Partners in the needs assessment have good local knowledge, which is grounded in the experience of local cultures and communities' histories. Consultants from outside Papua often have good qualifications and expertise but often bring strong cultural biases to their work in Papua and are thus unable to effectively assess local conditions and/or effectively share their skills or knowledge.*

*This situation is seen as contributing to the general picture of "what's lacking" in Papua, rather than a picture of the opportunities, assets and capacities that can be further developed there. Since the 2004 general elections, many of the local parliaments are composed of elected councillors that are not experienced in the tasks for which they now have responsibility. They have difficulty articulating a common vision and strategy and have limited competence to exercise their control functions (PNA reports, 2005). They also have minimum interaction with their constituency. In particular, the new kabupaten governments have limited experience in planning and monitoring of development, and civil servants are not accustomed to collaborating with those who have the capacity and capability to provide the services.*

### 1.3 Possible Measures to Address Current Challenges

The very low number of roads and other infrastructure means that the resource requirements for meeting the MDGs in Papua are enormous. The application of the MDGs to individual countries was not what was originally intended when the goals were set. Their application at provincial level in a country as diverse as Indonesia is also a mistake as it fails to deal with existing inequalities between parts of the province.

The provincial government, presumably under pressure of the national government, is clear as to what the MDG objectives are for the province and has their achievement in 2015 as a long term goal. As noted elsewhere, there appears to be no clear intermediate targets. Nor are there any clear figures as to the number of schools, clinics, required etc. UNDP as lead donor does not have any such figures and their resident representative commented that there was considerable reluctance in Papua to the use of clear targets.

Road Density Figures are often quoted as a measure of the need for rural roads and give the km of road per thousand sq km of area. In 1989 Road density varied greatly throughout the archipelago; in Java there was 500 kilometer of road for every 1,000 square kilometer in area; comparable values were 230 in Sulawesi, 160 in Sumatra, and only 40 in Kalimantan. The current figures for Papua is 97 but as can be seen from table 1 this varies greatly between the kabupaten.

Road density figures can be misleading since they take no account of population density or distribution. The Rural Access Index (RAI) was developed by the World Bank and measures the percentage of the population of rural people who live within two kilometres (typically equivalent to a walk of 20-25 minutes) of an all-season road as a proportion of the total rural population. The figure shown for Indonesia is 94% (very close to the average for South East Asia) but there is no disaggregation at provincial level. A reliable figure for Papua province would be very useful but would be difficult to establish given the generally poor data. As can be seen from Table1 there is a lack of any roads in some kabupaten with significant populations.

Even in some of the more developed coastal kabupaten the rural infrastructure is very unevenly spread. In Kabupaten Jayapura one of the four development regions has no roads and has to be reached by sea or aircraft.

In much of the centre of the province the topography is very difficult and building roads will be expensive. Linking each of the kabupaten headquarters to the main provincial road network is given as a target for the next 20-25 years. This seems very unambitious and no one could give a figure for the length of road required to achieve this. AusAid has been asked to undertake a study of the long term development corridors but it is not clear whether this will include assessments of rural roads.

#### Current Capacity of Implementation Agencies

A UNDP led multi-stakeholder analysis in 2005 commented that capacity at provincial government is generally reasonable. Capacities and capabilities have been build over a long period time, first as de-concentrated entities managing the resources of sector ministries and subsequently as decentralized entities managing 40% of the resources available to the province.

The analysis also found that, despite the decentralization policies, however, provincial government never really changed its authoritarian attitude, instructing rather than interacting with the autonomous kota and kabupaten, and with little or no interaction with private sector and civil society. The kota and kabupaten governments, with a smaller portion of the budget, developed similar attitudes in maintaining the control over the allocated budget, providing

little or no budget to the sub-units of local government (kecamatan and kampung) and without much interaction with private sector and civil society<sup>12</sup>.

Quality of staff in the kabupaten is very variable. The newest and more remote find it difficult to attract competent staff. Kabupaten such as Jayapura which are close to facilities are well staffed although senior personnel are often non-Papuan.

More than 60 percent of total kampungs in Kabupaten Jayapura do not have permanent offices which were required to support administrative activities. As a consequence, many administrative activities are conducted in the house of the village chief.

### **Construction Industry**

There are large civil engineering contractors working in Papua from elsewhere in Indonesia. Work seen on a major machine intensive road and bridge reconstruction programme near Sentani airport suggested that they are capable. There is certainly no need for support from ILO.

Small local firms headed by indigenous people are being given preference for government contracts of up to 1 billion Rps (\$110,000). The lack of capacity of local contractors was mentioned on a number of occasions during the visit and they have been complaining that there is insufficient work being provided for them. There appears to be no separate association for these indigenous contractors.

The General Secretary of GAPENSI – the National Contractors Association of Indonesia – Papua Branch told us that indigenous contractors were regarded as an integral part of the organization. GAPENSI were providing help to them in a number of ways including mentoring, training and technical support. When ASIST AP's interest in training and supporting small scale contractors, particularly in the area of LBAT was mentioned he said that GAPENSI would be interested in playing a key role in any programme. He also expressed disappointment that previous discussions with ILO over a central skills training school had come to nothing.

### **Institutional Development Requirements**

The institutional development requirements of Papua province as a whole are enormous covering every aspect of the development process. Within the limited area of rural infrastructure that there is a need for all levels of government to be strengthened so that they can achieve the governor's vision as set out in the RESPEK programme.

Broader governance programmes are being undertaken by the UNDP led team and are outside the scope of the ILO. There is a demand however for ILO to assist with training of facilitators for RESPEK to ensure that implementation is undertaken efficiently. This opportunity should be taken. There has also been a request from Kabupaten Jayapura to provide similar help although no funding is available for this and it could cut across the proposals for support to RESPEK.

## **1. 4. Viability of the Local-resource Based Approaches**

The Governor's new policy is focused on local consultation and paid use of community labour to meet community needs. Indigenous small contractors are also being encouraged. It is clear therefore that local resource based approaches are recognised as being relevant to the development of Papua. Discussions with contractors and others indicated at least a willingness to consider the use of LRB approaches.

RESPEK is based on an understanding that current planning and implementation processes for rural infrastructure are inadequate and that they must be replaced by community based approaches. KDP itself is trying to improve such processes on a country wide basis. As noted above, having such admirable goals does not mean that they can be achieved immediately. Attitudes must be changed and capacity must be built.

The fact that RESPEK is proceeding on the basis of planning and implementation processes that are adopted from KDP's existing processes is worrying given the limitations of those processes as reflected by the evaluations that have taken place and the teams own assessment of the existing KDP programme. RESPEK represents a major expansion from KDP and there seems to be no acceptance in the World Bank funded Support Office for Eastern Indonesia (SoFEI) or RESPEK that this is an issue.

Training of existing facilitators has taken place at the University of Cendrawasih (UNCEN) for 5 years. Senior high school graduates have been trained on 6 month courses to be facilitators mainly focusing in rural infrastructure and participatory planning.

In November 2007, the head of SoFEI in Papua asked for ILO support in the training of community planning for social facilitators and for training for labour based works. This would be extremely useful although there would be a need for ILO to review the current planning and implementation systems and make improvements if there were seen to be necessary. However, the request has been withdrawn partly because of lack of funds. Training on social issues including community based planning would have to be very context specific. All of the 260 different ethnic groups in Papua would require a different approach according to the vice rector of UNCEN. This may be a little over cautious but it does underline the importance of avoiding a simple transfer of planning techniques that have proved to be effective elsewhere in Indonesia.

The KDP programme is using standard details for construction and guidelines from Gol. The documents appear to be rather limited and dated. In so far as roads are concerned they are not as good as the rural road guidelines produced in Bahasa by ILO ASIST AP or the techniques being used in Aceh and Nias.

The quality of works produced by the KDP does not appear to be good. The head of the SoFEI office has asked for support from the ILO in training in both civil engineering techniques and planning for the RESPEK programme. Part of the problem with this is that the civil engineering techniques cover the whole range of infrastructure activities including water, buildings, electricity and anything else; not just the labour based techniques that ASIST promotes. The broad range of techniques is an inevitable consequence of the open menu approach of the KDP and RESPEK programmes.

In addition to populations and road lengths, Table 1 shows figures for job seekers in each of the kabupaten. These figures do not include the partially employed or others who would take paid work if it were available close to their home. Such work would help to transfer funds to the poorest in the more remote locations.

The enormous requirement for roads and other infrastructure coupled with very high levels of unemployment suggests that unemployment in the rural areas could be reduced by adopting a policy of mainstreaming LBAT in the construction and maintenance of rural roads. This could provide an additional 10-15,000 person work days for each km of new rural road built without significant delay or increase in costs.

Other Provinces have used labour-based schemes to build maintain and repair roads in Indonesia under various schemes. These have largely been successful and country specific LBAT manuals and guidelines are now available. The programmes to date have been

relatively small scale although the post-tsunami programmes in Aceh and Nias were substantial.

Small local firms headed by indigenous people are being given preference for government contracts of up to 1 billion Rps (\$110,000) in Papua.

GAPENSI – the National Contractors Association of Indonesia – Papua Branch is already providing help to them in a number of ways including mentoring, training and technical support. GAPENSI would be interested playing a key role in any ILO ASIST programme. This provides an excellent entry point.

This could also be an opportunity to advocate LBAT approaches construction or reconstruction of gravel and earth roads built by the kabupaten and province. Creating an enabling environment would be essential.

The current situation where such a large proportion of earth and gravel roads are assessed by BAPPEDA as badly damaged indicates that inadequate attention is being given to road maintenance. The needs for new roads and the current process where bids for maintenance funds have to compete with bids for new work in the provincial and kabupaten planning process is leading to a situation where inadequate funding is being provided. There needs to be a much more informed approach to the funding of road maintenance at provincial level. The high level of damaged roads in the two provinces shown in Table 2 suggests that major reconstruction is required on 39% of the gravel roads and 54% of the gravel roads. If it is assumed, conservatively that 2,000 labour days/km would be required for reconstruction of the gravel roads and 1,000 labour days/km for the earth roads then a total of about 16 million labour days would be provided making a significant impact on unemployment levels and the rural economy.

A road maintenance study such as that undertaken by ILO in Aceh could be carried out in Papua province. This would help to inform the debate and hopefully move to a situation where road maintenance funds were kept at a level where current infrastructure does not deteriorate.

A study of this nature and the conditionality that goes with it are usually best undertaken as part of a major donor investment programme. The lack of such programmes in Papua Province means that we lack a natural source of funding and the necessary leverage. Furthermore experience with governance issues (including failure to establish a road fund) on the World Bank Eastern Indonesia Transport Project have not been encouraging, even as part of such a project and it might not be easy to obtain donor funding.

## **1.5 Possible ILO Technical Collaboration**

Papua's needs are enormous and the province would clearly benefit from support in all areas covered by the ILO ASIST AP programme. There does however need to be a clear demand from local stakeholders (and ideally fund-holders). There is always a danger in raising expectations in an exercise such as this when ILO has no funds of its own to implement a programme.

The multi-donor trust fund for Papua is no longer operating. There may be a further phase in the future but this is far from certain.

Based on the findings of this mission there are three clear openings for technical cooperation:

- ILO has been asked to support the training of technical facilitators for the RESPEK programme. There is a clear need to improve both the quality of work and the local level planning process in KDP and government more generally.
- Kabupaten Jayapura has asked for similar training for technical facilitators for their own ADK programme. No funding is available.
- The combination of a clear provincial desire to help small contractors, a relevant prospective partner (GAPENSI), relatively high unemployment and underemployment levels and the growing appreciation by some stakeholders that labour based construction can benefit the poor suggests that a programme of support to small contractors would be useful and would be welcomed. There is no obvious source of donor funding for this and ILO may have to self finance at least in part in the first instance.

### **Support for RESPEK and Kabupaten Jayapura**

Requests have been received from SoFEI (on behalf of RESPEK) and from the Secretary of BAPPEDA in Kabupaten Jayapura for similar types of training. In both cases the intention would be give senior high school leavers the technical skills to support kampong level infrastructure. In each case the course would be six months and the trainees would, on completion, work at kecamatan level providing support to funding provided from RESPEK and the kabupaten respectively. Both courses would be conducted in Bahasa and use of a translator would not be workable.

It must be understood clearly that neither of these is for training in conventional LBAT that is ILO ASIST's comparative advantage. Rather it is in a broad range of skills that could support the full range of minor infrastructure with a strong emphasis on water supply. The intention is that the technical facilitators trained would be able to support the kampongs in designing and implementing the work they had chosen.

A six month training course at this level would produce individuals with only the most basic grasp of what was needed. Funding is available for the RESPEK work although the course has still to be designed and it is intended that details should be finalized at a meeting in Papua in mid February. If ILO intends to support this programme then a member of staff knowledgeable on the sector should attend the meeting. Limited funding is available.

The training for Kabupaten Jayapura is a very new concept that was suggested at the seminar on the last day of the second visit and discussed in detail at a meeting that afternoon. Whilst it could not be rejected out of hand there is no funding available and ILO would, if it agreed, be supporting two different sets of training for separate members of staff working in the kecamatan. There is a danger that ILO would be seen as perpetuating the disjointed approach to village level infrastructure that the PNA and other assessments have seen as a fundamental problem.

None of this is strategic level work but it would give ILO a seat at the table that might, in turn, offer the opportunity to influence future programmes.

### **Small Contractors**

The enormous requirement for roads and other infrastructure that in Papua coupled with high levels of unemployment suggests that unemployment in the rural areas could be reduced by adopting a policy of mainstreaming local resource-based approaches (LRB) in the construction and maintenance of rural roads. Whilst individuals in government and elsewhere expressed enthusiasm for LRB there is, at present, no high level endorsement for



major change. It is therefore unrealistic at present to attempt to encourage a shift from machine intensive to labour based construction at all levels in Papua.

Fortunately all significant construction and maintenance work at provincial and kabupaten level in Papua province is undertaken by contract. Small local firms headed by indigenous people are, being given preference for government contracts of up 1 billion Rps (\$110,000). The lack of capacity of these local contractors is an issue in the province. They have also been complaining that there is insufficient work being provided for them. They are said to use labour more than other contractors but there is no coherent approach to, or encouragement of, this.

Other provinces have used local resource-based approaches to build maintain and repair roads in Indonesia under various programmes. These have largely been successful and country specific LRB manuals and guidelines are now available. The programmes to date have been relatively small scale although the post-tsunami programmes in Aceh and Nias were substantial.

By undertaking a training scheme for local contractors ILO could at the same time strengthen these companies and encourage the use of LRB at that level. Once this has been shown to be a credible approach ILO will be able to use it as a basis for future expansion of LRB at other levels in the province.

The training for small contractors will require establishment of courses and mentoring through GAPENSI that will provide contractors with the skills to tender for and complete works within their financial limits.

It will be essential to ensure that government establishes an enabling environment for such contractors to bid for labour based work. It may be necessary to undertake some of the training away from Jayapura.

Ideally this training should take place as part of a larger programme where demonstration contracts are being let. If this cannot be arranged then links to Aceh Nias to provide practical experience may be desirable.

There are links to the Aceh Nias programme undertaken by ILO and relevant training programmes and documents have been prepared. There are also links to the ongoing KDP programme.

The RESPEK training would be undertaken at University of Cenderawash (UNCEN) and organised as part of the RESPEK training programme funded under KDP. The small contractor training programme would be undertaken through GAPENSI and provincial public works.

### **Next Steps**

An appropriate member of staff should attend the proposed RESPEK programme design meeting in mid February. Once this is done, detailed project documentation can be prepared.

There is the usual problem here of how to avoid raising expectations whilst trying to build interest in what we have to offer. ILO must make a linkage quickly between the small contractor component of the Aceh Nias programme and the stakeholders in Papua. This should be done by inviting senior personnel from GAPENSI and Papua provincial public works to visit Aceh so that they can see what is happening and get a sense of its relevance for Papua. This will require modest funding for flights etc. They must be accompanied by a

senior ILO member of staff who will also have the task of visiting Papua and completing a detailed project proposal that can be submitted to a donor or other for funding.

Concurrently funding must be sought from a donor.

On small contractor training arrangements must be made for the proposed visit to Aceh Nias and funding must be sought from a donor.

## 2. Maluku Province

### 2.1 Introduction

The main problem faced in Maluku Province is isolation; many inland villages do not have road access. This is an obstacle to achieving the overall goal of poverty reduction. An understanding of the correlation between access and poverty is required. Accessibility is determined by the location of different points of attraction on the one hand, and on the other by people's ability to reach these points. Accessibility can be defined in terms of the ease (in terms of time, effort and cost) with which a need can be satisfied.

Rural Access may be analysed internally and externally. Internal access is related to activities in and around the village and takes mainly place on community paths and tracks. The domestic transport of water and fuel wood collection and trips to the fields can be a time consuming issue; especially for women. External access covers trips outside the village to a grinding mill, to obtain and market agricultural and other goods, to obtain health services and for other social activities. Trips take place on access paths and tracks leading to the classified and non-classified road network but also on the network itself.

The positive correlation between access and agricultural development is generally recognised. Efficient and affordable transport is vital for movement of agricultural inputs and services to farmers. It is also vital for movement of agricultural output to markets. Availability of good transport enhances a region's linkages and contacts with other regions and promotes the flow of information and exchange of ideas. An in-efficient transport system is a strong disincentive for farmers to increase production, because timely delivery of produce to competitive markets often makes the difference between success and failure.

The Government and the Administration understands the correlation between access and poverty. A future collaboration between Maluku and the ILO should therefore take its starting points in a joint understanding of how the LRB approach might help to improve the situation.

The Indonesian economy is performing well with a growth rate of 6-7%; this is partly the result of a stabilized macroeconomic situation with falling budget deficits and acceptable inflation rates. However, un- and underemployment remains a major problem. The total number of un- and underemployed is estimated at around 40% of the labour force- or more than 40 million people affected. The official unemployment rate is around 9.5%.

According to the EU<sup>13</sup>, Indonesia is on track to achieve MDGs in certain key areas: the goal of halving the proportion of people living on less than US\$ 1 a day has been achieved, although 7.5% of the population still belongs to that category and universal primary education is near its achievement. However, poverty remains a challenge with nearly 50% of the population living on less than US\$ 2 a day. Rural poverty is of particular concern and includes isolated populations; i.e. without access.

The National Medium Term Development Strategy 2005-09 (MTDS) aims at reducing the poverty rate by half and reducing unemployment to 6.7%. The Poverty Reduction Strategy is an integral part of the MTDS and gives emphasis to employment creation, and business opportunities, empowerment and capacity building for the poor.

### 2.2 General Overview

The geography of Maluku is very particular; it is an archipelago consisting of more 100 islands occupying an area of 54,000 square kilometers with a population of around 1.4 million living in 877 towns and villages<sup>14</sup>. With the exception of Ambon Island, where the provincial capital is placed, the population density is low with an average of around 10 inhabitants per square kilometer.

The gross domestic regional product per capita for 2004 was Rp 3.25 million, well below the national average of Rp 10.64 million. The percentage of poor people amounted to a little over 33% in 2006 and the Human Development Index stood at around 70%. Un-employment is quite high and amounts to around 15% while the underemployment ratio is even higher. The total labour force is around half a million and the number of unemployed is exceeding 75.000.

The official provincial minimum wage is Rp 28,000 (app US\$ 3) per day for unskilled labour, however going rates in Maluku ranges between Rp 10-20,000 per day.

### Overview of Infrastructure

The social conflict between religious groups, which was ongoing in Maluku 2003-4, had negative consequences for education and health facilities as a substantial number of buildings were badly damaged just as maintenance activities on the road network stopped.

The provincial planning authorities explained that there are many villages without access, which are not properly equipped with appropriate basic infrastructure. However, the problem is not documented statistically.

Table 2.1: Overview of road network and its condition in 2006<sup>15</sup>

Category	Km Total	Paved Km	Road Condition Good - Moderate %
National Roads	955	637	72
Provincial Roads	900	635	71
District Roads	2280	880	31
Total Km	4135	2152	49

The network totals 4,135 km of roads. For an area of 54,000 sq km it is a very limited network, however it should be noted that roads are to be found on 22 of the islands only. Sea transport does naturally make up for a part of the transport needs.

A little over seventy percent of the National and Provincial Roads are in good or moderate condition but only 31% of the District Roads; this points to serious problems with maintenance. The paved network forms around half of the total network and is in relatively good condition. Problems on the paved network occur in relation to coastal erosion or with unstable soil and rock in mountainous areas. Earth and gravel roads form the other half of the network and they are generally in a poor condition.

The following Table 2.2 compares the network of Maluku with that of Indonesia, the Philippines and Thailand and indicates a backlog of roads in the province.

Table 2.2: Comparison of Road Network<sup>16</sup>

Area	Km Road	Km/1000 pop	Km per 100 sq km
Maluku 4135	2.9	7.6	
Indonesia	368263	1.5	19.2
Philippines	202205	2.3	67.4
Thailand	233096	3.6	45.3

Roads are mainly to be found along the coast, where the majority of the population is settled. It does, however, leave the population in the interior in isolation. As the soil generally is rich, the climate conducive and cash crops such as spices, coconut and cacao are well known; there is a great economic potential in opening up of access.

With decentralization, provincial and district roads became the property and responsibility of provincial and district governments. National roads continue to be the responsibility of the Directorate General of Highways. The Public Works Departments have the other road sections and are responsible for road management at the local levels. The department is well staffed at both provincial and district level and is fairly well organized. At provincial level some funds are available for road works whereas the situation in the districts seems poorer. Staff training is now also a local level activity but with no road related training facilities in the province, travel to Sulawesi is the only option. This is costly and limits technical training for staff.

The national roads receive an annual allocation for routine maintenance of Rp 15 million per km (approx 1.600 US\$/km) from the central government. Provincial and district roads do not receive a fixed allocation for maintenance but Public Works spends allegedly around 5% of their annual budget on maintenance, however some sources indicate that districts generally do not undertake maintenance activities on their road network.

There are around 1600 primary schools, with around 11 in the public sector and the remainders private. Each school has on the average 6 classrooms and almost 230,000 pupils are enrolled.

The health sector has 17 hospitals: 6 public, 7 private and 4 military. There are 136 Public Health Centers and around 900 other health facilities. The province has a total of 95 medical doctors and around 1,800 nurses; not much for a population of 1.4 million.

### **Planning Process**

The legal framework for decentralization is based on Law Nos. 32 and 33 - 2004, and the derived Law No. 25 - 2004- on the National Development Planning System has made significant changes in the development planning and budgeting at local level. With decentralization well in place the responsibility for overall development planning rests with the Provincial Planning Office (BAPPEDA)

Development planning includes:

- The Regional Long-Term Development Plan (20 years) called RPJPD, which refers to the National Long-Term Development Plan (RPJP).
- The Regional Medium-Term Development Plan (5 years) called RPJMD which refers to the National Medium-Term Development Plan (RPJM).
- The Local Government Working Plan (Annual Planning) called RKPD which refers to the National Government Working Plan (RKP).

All 3 plans are formulated through Development Planning Forums (Musrenbang), starting from Desa (village) level, Kecamatan (district) level, Kabupaten/Kota (regency/municipality) level, and finally Province level. For the annual planning, the forum at Desa level is normally conducted in January, at Kecamatan level in February, at Kabupaten/Kota level in March, and at Province level in April.

The Musrenbangs are basically aimed at collecting aspirations of communities and participants include government officials, representatives of non-governmental organizations, representatives of international agencies, religious leaders, cultural leaders, private sector and community representatives.

First stage of the medium-term plan for Maluku (2003-2005) focused on recovery and stabilization activities, including: (1) social stability and security; (2) community empowerment; and (3) preparation of various infrastructure. The second stage (2006-2008) aims at creating sustainable development with emphasis on: (1) economic growth; (2) community empowerment; and (3) social stability and security.

RKPD- the annual plan for 2007 aims at improving competitiveness and economic growth to reduce poverty and unemployment. Priorities for 2008 include infrastructure development as the fourth priority while the first priority is poverty alleviation and unemployment reduction through community empowerment.

At the overall level there are no specific development objectives and strategies related to rural infrastructure and provincial and district roads in particular. The province is rather seeking its guidance from the national level. The Public Works Department is working with a road network strategy, named Trans Maluku, which aims at binding the archipelago together: with regard to roads this implies a focus on the primary network and not on opening up of accessibility. However, no policy targets are set in relation to isolated areas or to accessibility in general.

Development of village level infrastructure is basically in the hands of the two major programmes described below: KDP and PPIP.

### **KDP –Kecamatan Development Programme**

In 2007, the KDP was implemented in 7 Kabupatens and 36 Kecamatans in Maluku Province. The budget provided for each Kecamatan range between Rp 750 million and Rp 1billion. In addition there is counter sharing from the Province of Maluku and the 7 Kabupatens. The amount of sharing depends on the actual fiscal capacity, but normally ranges between 20-40 percent of KDP allocations.

Total budget utilized was about Rp 15.5 billion in 2002 while the present budget is around 13.5 billion. The budget is mainly allocated to infrastructure development but is also spent on education, health, and productive economic activities. The activities were reduced during and after the social conflict but are now running smoothly with a good disbursement.

Physical infrastructure covered by KDP include drinking water facilities (35% of budget in 2006)<sup>17</sup>, roads (25%), irrigation/drainage (15%), the remaining budget is spent on small health care facilities (village polyclinics -Polindes), kindergarten facilities and sanitation facilities. KDP funds can not be spent on religious facilities. Non-physical activities started in 2006 and were focused on a women's loan and savings programme (revolving funds for women) and education. Starting 2008, the KDP will also develop inter-village projects.

Table 2.3: The Coverage Area of KDP in Maluku (2002-2007)

Year	Budget Rp Billion	Number of Kabupaten	Number of Kecamatan	Number of Villages	Number of Activities
2002		2	7	98	118
2003	15.5	4	19	172	231
2004	12.5	3	16	142	180
2005	6.3	2	3	32	36
2006	3	2	3	27	29
2007	13.5	5	18	167	218

Source: BPMD Maluku Province, 2007.

A couple of KDP projects were visited on Seram Island, a gravel road without side drains of less than 1km connecting around 10 households within a village to a village road and a water supply scheme for 12 households- a borehole with an electric pump and a water tower.

The GOI agency responsible for KDP is the Community and Village Empowerment Agency (BPMD). It has offices at district – and sometimes at sub-district level. It is well staffed but like other government agencies it suffers from low recurrent budgets, which reduces the efficiency of the staff. To assist with the planning and implementation, a special Consultancy has been established with over 6,000 staff members in Indonesia. In Maluku, there is a central office, a coordination office at district level- and for each sub-district, there are 2 staff numbers: one technician and one community worker. The KDP is planning an expansion to all districts of Indonesia, and subsequently the number of consultants will need to be doubled in the coming years.

P2PK is an Urban Poverty Project and part of the KDP family. It operates in Ambon, the provincial capital of Maluku and in a few other towns. Activities are similar to those of KDP in general, but irrigation infrastructure is not included.

### **PPIP- Rural Infrastructure Improvement Programme**

This programme is partially financed by ABD and is designed to: (1) increase accessibility of poor people to basic infrastructure in rural areas; and (2) increase community participation in rural infrastructure provision. Activities include: (1) development of rural transportation facilities, such as rural roads, bridges, and small piers; (2) infrastructure to support agriculture activities, such as rural irrigation; and (3) basic infrastructure, such as drinking water and sanitation facilities.

Basic principles in the implementation of PPIP include acceptability, transparency, accountability, and sustainability.

The basic approach is (1) community empowerment, (2) focus on poor people; (3) autonomy and decentralization; (4) participatory; (5) encouraging self-finance; (6) integrated with rural development; and (7) strengthening institutional capacity.

The organization of PPIP consist of Governor/Bupati as responsible person for monitoring and evaluation, a Coordination Team, an Implementation Team, and a Working Group – all at provincial level. There are implementation units at Kecamatan and Desa levels. Support is provided by consultants from national to local levels.

Total budget for the PPIP in 2007 is Rp 23 billion, which has permitted implementation in 7 Kabupatens, 1 City, 48 Kecamatans, and 891 Desas.

### **EIRTP-2 - Second Eastern Indonesia Region Transport Project**

This is a World Bank financed road programme. It has a budget of US\$ 199 million and runs from October 2004-June 2009. The main emphasis is on improving national highways but it does also include support for improved road management. The local government is not much involved – but the project will improve a national highway on Seram Island. The Ministry of Public Works in general, and the Directorate General of Highways in particular, is responsible for implementation, assisted by a considerable technical assistance team.

### **Role and Capacity of Private Sector**

Road investments for provincial and district roads are inscribed in the annual and medium/term plans of the local governments and are generally financed from regular budget funds. In Maluku the World Bank funded programme is expanding a national highway on Seram Island but otherwise there appears to be no other external financing available for classified roads in Maluku.

Table 2.4: Road Investors and Owners by Classification

Classification	Investor	Owner	Maintenance standard
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1. National Roads	National Budget	N. Highways	Reasonable
2. Provincial Roads	Provincial Budget	P. Public W.	Reasonable
3. District Roads	District Budget	D. Public W.	Poor
4. Village Roads	KPD/PPIP	Community	Poor

Almost all works, including maintenance activities are subcontracted to the private sector. In 2006 the National Contractors Association had 1280 contractors registered as members, an increase of over 300 from the previous year. Most of the contractors are small and under resourced with only light equipment and/or “hire-in” from other contractors. Construction activity levels are especially high on Ambon Island, which have a concentration of the bigger contractors as revealed by Table 2.5 below.

Table 2.5: Number and Size of Contractors in Maluku 2005

	No Contractors	No Employees	Average size
Ambon Island	296	5,865	20
Rest of Province	613	4,281	7
Total	909	10,146	11

The contractors association occasionally organizes training for its members and is interested in future collaboration.

## 2.3 Assessment of Challenges

The TOR of the study requested an estimate of additional resource requirements and an adequate timeline for the provision of sufficient and effective infrastructure in rural areas. On the basis of the available information it was not possible to answer the question. However, a 15-25 year time horizon seems likely, unless the provincial budget for both investments and recurrent expenditures is vastly expanded.

### Ongoing Programmes

One of the objectives of KDP is local employment creation and thereby increasing income; however as Table 2.6 shows, the total number of workdays created is limited considering the size of the investment. The cost per workday ranges from Rp 300,000-760,000 (US\$ 32-81), which is relatively high for a self-help scheme. Compared with a total unemployment of around 90,000, or approximately 2 million workdays, for Maluku as a whole, the impact on unemployment is limited. The average number of workdays per worker ranges from 6-13; with a daily wage of some Rp 15,000 the average cash earned per worker is in the range of Rp 90,000-195,000 or 3-6% of the average income in Maluku.

Table 2.6: Employment Creation

Cycle	Investment per workday Rp 1,000	Working Days	Number of Workers	Number of Workdays per worker
7	600	10,534	1,114	9.4
8	760	3,946	644	6.1
9	300	44,947	3,399	13.2

Source: BPMD Maluku Province, 2007.



In Western Seram District five road projects of a max 1 km length, were undertaken in 2006 at an average cost per km of Rp 100 million (US\$ 10,000+). The district covers 4,000 sq km, houses a population of 150,000 in 87 villages but has only 20 km of district roads. KDP is only working in villages with access; i.e. located along national and provincial roads - leaving part of the population untouched. KDP is in its next cycle planning an expansion of activities to all villages in Maluku, however without access that will be difficult.

The long term benefits of road and other infrastructure investments is related to benefits relating to the utilisation; or expressed in economic terms to the return on investments. An impact analysis of KPD projects in 4 provinces<sup>18</sup> (not including Maluku) found the following very positive results:

Table 2.7 Economic Internal Rate of Return – 4 Provinces, 113 Projects

Type of Infrastructure	No. Projects	Average EIRR
Water Supply	41	38%
Roads/ Bridges	55	53%
Irrigation	17	68%
Total Projects	113	53%

The impact analysis concludes that “In most cases these very large benefits resulted from either entirely new economic activities that were made possible by KDP infrastructure, or suppressed/latent production capacity that was finally able to secure access to local markets. The most frequently seen examples were roads that provided access to previously isolated villages where, before the road, all produce had to be hand carried or carried in small amounts on motorcycles for kilometres before reaching the nearest market.”

Substantial benefits are to be gained from opening up isolated areas; however this type of activity does not appear to be included in the present KDP in Maluku, which is focussed on individual villages and their internal needs.

The approach and the activities of the PPIP appear to be similar to KDP, only Public Works Departments are more directly involved, contractors are used and the infrastructure appears to be of better quality, although more expensive. The employment impact of the PPIP is probably confined in the same ways as that of KDP, i.e. the cost per workday is high and the overall impact on unemployment is reduced.

KDP is based on bottom-up planning, and besides an overall budget allocation; the identification and prioritization of the village level infrastructure projects is entrusted to the local community. KDP implements this approach strictly and accepts the decisions of the community representatives. This approach does however have other consequences and a recent evaluation<sup>19</sup> of the KDP found the following:

**Village heads are the strongest factor influencing KDP implementation.** Village heads are the center of village life and are very powerful when it comes to the management of development projects. On the positive side, they can mobilize and organize villagers as well as provide important encouragement for villager participation and overall project legitimacy. Conversely, they can also dominate the process in a number of ways: by appointing KDP actors, especially if the initial KDP meeting is poorly attended, by pressuring or replacing KDP actors during project implementation, and by taking unilateral decisions in directing villagers to implement the project. Village parliament (BPD), the village institution charged with monitoring village government and providing a check to village head power, is also weak in most villages since it receives little support from higher levels of government to take action when there is a problem. Members are also unclear about their function in some locations.

**KDP had little to no impact on changing the role of women within the village, though there are cases where the program provided a first time experience in development for village women.** In general special women's meetings have value when they are implemented well. However, women's involvement follows sharply regional patterns, and women are unfortunately still not active in most locations, primarily for cultural reasons. Women's credit programs generally do not have the effect of drawing more women into the program but often have the effect of excluding poorer women who feel that they cannot repay. In some cases, credit programs also have the effect of excluding women from planning infrastructure projects.

**KDP does an excellent job of alleviating poverty at the village level but does so by helping all villagers, not by targeting poorer groups within the village.** Allowing villagers to choose priority needs greatly helps alleviate poverty at the village level. For example, an irrigation system helps landowners but also creates more work for those who do not have their own land. However, the practice of majority voting within the village sometimes has the effect of discouraging smaller (often outlying) groups from participating. If these groups are far from the village center, they may also not benefit from a project that helps the majority of villagers. In villages where the main needs (main road, key irrigation channels, etc) have been met, projects are now targeting smaller groups within the village. As a result, effective poverty targeting may become more important in the future. Social maps introduced in KDP 2 are generally unused.

## Capacity

The provincial government is generally well staffed and equipped regarding the key actors: Planning Department, Community and Village Empowerment Agency and Department of Public Works. There are however constraints on the recurrent budget, which limit activity levels. PWD informed that they could only afford to send two staff members for training each year as decentralization had left Maluku without its own training facilities.

The planning system is based on very general objectives set at the central level and specific requests originating from village and district levels. There is thus a need to supplement the planning of rural infrastructure with a rural transport strategy and with accessibility mapping.

Maintenance planning and procedures appear to be lacking behind and a review and a possible revision is needed. The provincial government made the following observations related to maintenance:

- The choices between new construction and maintenance of social and economic infrastructure in rural areas were based on the interest of the local communities.
- Although, the awareness on maintenance aspects has been increased, there are many isolated areas in Maluku Province, which require the construction of new social and economic infrastructure, including rural road networks.
- Besides, the limited budgets available have direct consequences and lead to reduced maintenance activities.

The private sector, mainly represented by contractors but also including consulting engineers, is available on the major islands of Maluku - with a concentration on the island of Ambon. Most of the contractors are small and relying on hiring-in of equipment but otherwise relying on labour. On the more remote islands with few contractors and a low construction activity level, access to equipment is difficult – or costly as it needs to be shipped in. There is no relevant training of contractors and their staff in the province, except for ad-hoc training organized by the contractors association.

KDP has a sizeable staff of consultants at provincial, district and village level. KDP is a central government programme and consultants are recruited and trained through the central organization. Improved technical skills, especially related to maintenance, have been raised as an issue.

The key actors are also represented at the district level, there seem to be ample staff however the recurrent budget is minimal and the activity level is therefore reduced. Access and maintenance planning appear to be weak and is in need of reinforcement. Staff training is an even bigger issue than at the provincial level.

## **2.4 Potential for a Local-resource Based Approach**

### **Attitude of Government**

Already at the start of the visit to Maluku, the Secretary of the Government of Maluku Province Mr. Said Assagaf welcomed the ILO team and indicated that the Government of Maluku Province supported a future collaboration with the ILO. His analysis contained the following elements:

- Accessibility is a problem as many areas in Maluku Province were remote with limited access and there is a need to improve access in order to achieve development goals.
- A capacity building programme is crucially important, and the ILO could contribute through local or centralized training. It would be appreciated if the ILO would invite senior officials of the Government of Maluku Province to participate in international training programmes.
- There are several international agencies currently work in Maluku Province, such as the UNDP and UNICEF. The Government has provided office space for these agencies at the Governor's Office and would do the same for the ILO.

### **General Relevance**

The overview presented in Section 2 indicates that the overall situation of Indonesia with regard to the national economy and to the achievement of MDGs is on a good track with economic growth and a reduction of poverty. The Poverty Reduction Strategy gives emphasis to employment creation and empowerment of the poor.

The general situation in Maluku is conducive to a local resource-based approach; the provincial government is in agreement and the need is evident. Maluku is a poor province with less than a third of the average per capita income than Indonesia, un- and underemployment is prevalent, planners and technicians are engaged by the government and private sector contractors and consulting engineers are already engaged in road works.

### **Specific Relevance and Need for Support**

The gross domestic regional product per capita in Maluku is less than a third of the average for Indonesia. The province is thus one of the poorest provinces. Unemployment is around 15% and underemployment is widespread. The average daily wage for unskilled labour ranges between US\$ 1-3 and labour is thus competitive with equipment.

Maluku has a limited network of around 4,000 km roads, half of which are district roads. Only 31% of the district roads are in acceptable condition due to neglect of maintenance. Roads are mainly found along the coast, leaving the population in the interior in isolation. Many villages do not have access and are therefore missing appropriate basic infrastructure. Furthermore ongoing development programmes can not work in the isolated villages.

National roads receive an annual allocation for routine maintenance while the provincial government is concentrating its efforts on the more important links. Districts do in general allocate 5% of its budget for maintenance but in reality very little maintenance work is taking place on the district roads. Maintenance planning and procedures appear to be lacking behind and a review and a possible revision is needed.

There is a well organized planning system with qualified staff at the district level. However there are no specific development objectives and strategies related to rural infrastructure and provincial and district roads in particular. The province is rather seeking its guidance from the national level and no policy targets are set in relation to isolated areas or to accessibility in general.

The provincial government is generally well staffed and equipped regarding the key actors: Planning Department, Community and Village Empowerment Agency and Department of Public Works, however recurrent budgets are limited and staff training is lacking behind.

The private sector, mainly represented by contractors but also including consulting engineers, is available. Most of the contractors are small and relying on hiring-in of equipment but otherwise relying on labour. On the more remote islands with few contractors and a low construction activity level, access to equipment is difficult – or costly as it needs to be shipped in. There is no relevant training of contractors and their staff in the province, except for ad-hoc training organized by the contractors association.

Development of village level infrastructure is basically in the hands of the two major programmes: KDP and PPIP. However, in Maluku, efforts are concentrated within the villages and little is done to improve access, which in other parts of Indonesia has proved to carry high economic benefits for the KDP. The employment impact of the programmes is limited and the costs of infrastructure appear to be high.

KDP has a sizeable staff of consultants at provincial, district and village level. KDP is a central government programme and consultants are recruited and trained through the central organization. Improved technical skills, especially related to maintenance, have been raised as an issue.

### **Poverty Reduction**

Worldwide experience from past rural development programmes and policies suggest that improving the poverty impact of rural transport infrastructure interventions requires attention to three guiding principles<sup>20</sup>:

- An emphasis on reliable, cost-effective access to as many of the rural population as possible, rather than high access standards for a few;
- Cost-effective and innovative techniques such as LBR and LBT, including spot improvement and low-cost structures; and
- A decentralized and participatory approach with strong local government and community involvement in decision making on local transport investments and maintenance.

## **2.5 Areas for Assistance**

Maluku does already have a decentralized and participatory approach to planning in general, it possesses a qualified and interested government and administration and there is a joint understanding of the problems. During the workshop organized at the end of the visit to Maluku, a joint consensus was reached on the following points:

- The main problem: many areas in Maluku Province have limited access, they are isolated. People living in these areas are mostly poor, because they are not able to exploit economic potentials and opportunities. It is extremely difficult to reach markets and people living in remote areas are mainly living as subsistence peasants.
- The local government can only undertake limited number of rural infrastructure projects, because of limited fiscal capacity. For this reason, there is a need to improve the capacity of local planners (province and district) in prioritization. A better understanding of development planning is important; i.e. an appropriate planning for rural roads, clean water facilities and housing.

- Most of the district road networks are in bad condition, mainly because of a lack of maintenance activities. In fact, there is no regular maintenance on the district roads. The ILO can support in increasing the awareness of local planners, especially at district level. There is also a need to have an appropriate maintenance strategy (efficient and effective) for the whole province.
- The KDP implementation is basically planned at central level. The ILO might help to optimize the KDP through improving prioritisation, training of staff and introduction of better maintenance. However, it would require an agreement with national management.

The future financing of ILO involvement in Maluku remains an open question. The governments of the Netherlands and New Zealand appear to be interested in extending assistance to Maluku and they may become future development partners. In the short term, embassy grants from a country like Denmark may be an option for accessing amounts up to US\$ 200,000.

### **Outline support**

The relevance of the LRB approach has been established above and the potential areas for the ILO contribution include:

1. Policy study and research aimed at formulating the most appropriate strategies for rural infrastructure development in Maluku Province; thereby influencing prioritisation of rural infrastructure investments, including those of national programmes such as KDP.
2. Development of maintenance strategies, especially for the districts and for the rural road network.
3. Assessment of the viability of introducing more local resource-based approaches on footpaths, gravel and earth roads for new construction and rehabilitation and for maintenance activities on all types of roads.
4. Introduction of IRAP approach to access planning to improve the capacity of local planners and technicians both at the different levels of government through on-the job training and adaptation of manuals to the existing planning system.
5. Capacity creation, including training of relevant government staff, contractors and KDP staff on LRB approach.

Re 1. A phased approach seems important, beginning with the collection of accessibility data, information on relevant sources of finance, of existing financial resources, analysis of the situation and, through a participatory process, development of a Strategy for Development of Rural Infrastructure with emphasis on providing access to isolated villages in a cost effective manner. The Governors Office, Bappeda, BPMD and PWD at provincial level should be the partners.

Re 2. As an integral part of the strategy development, existing maintenance procedures, planning, implementation, mechanisms of financing should be analysed in order to provide a revised maintenance strategy.

Re 3. The assessment of LRB viability might be undertaken in parallel to IRAP. It should study existing practices and give due emphasis to contracting procedures; e.g. bill of quantities, to see how more labour may be introduced without compromising tender procedures, quality and costs

Re 4. The adaptation of IRAP should be made through basic research/collection of access data from a few selective areas. This job should be done in collaboration with Bappeda at provincial and district level. The adaptation would include research into existing planning procedures and methodologies in order to streamline IRAP into regular planning efforts.

Re 5. Once strategies are approved and IRAP is integrated into the planning it will be necessary to undertake training needs assessments, develop training programmes and deliver training, including training of trainers, to relevant government officials at all levels, KDP staff and contractors. Technical training programmes are required for supervisors, contractors, and foremen at provincial and district level. No need to train consulting engineers. Training on prioritization of rural infrastructure for planners is important. Training should be extended to local contractors in the field of documenting and budgeting infrastructure proposals in relation to the bidding process. The Labour Training Centre in Ambon City has invited technical training to take place on their facilities. For KDP/BPMD there is a centralized Training of Trainers (ToT) programme for facilitators conducted regularly in Malang in East Java. However, this training programme only produces limited number of facilitators, and should be supplemented by training in Maluku.

Since planning and technical capacity is available, there is little need for direct construction works to take place under the ILO support. Limited works may however be included as part of the training effort. Availability of capacity may be a constraint on certain remote islands and it was suggested that the ILO supports development in the following districts: Maluku Tenggara, Pulau-Pulau Aru and Seram Bagian Timur. However, this should only follow the undertaking of activities 1-4 and should depend on availability of funds.

### **Steps to Be Taken**

This report and the Project Concept Note attached in Annex 1 provide a first step for a future collaboration with the provincial government. The report will provide a basis for discussion with the Provincial Government with the objective of reaching a consensus; so that a full proposal can be developed.

Once a consensus is reached, steps can then be taken to discuss the funding of the proposal. In the first place this should be with the provincial government to assess whether funds could be allocated from regular budget or from related programmes.

The ILO should also discuss the proposal with donors involved in both rural infrastructure development and capacity building in Maluku. This may include UNDP, the World Bank/KDP, the Netherlands, New Zealand and Australia.

In parallel with these initiatives the ILO would further engage in discussions with BPMD, the World Bank and the KDP in order to reach a collaboration agreement concerning training activities.

## 3. Nusa Tenggara Timur Province

### 3.1 Introduction

Through its regional programme ASIST-AP, the ILO has provided technical advisory support to Nusa Tenggara Timur (NTT) Province in 2003-2004 and as part of this work developed a series of guidelines promoting the use of local resource based methods in development and maintenance of rural infrastructure.

In order to further promote and where necessary modify these tools at local level through technical advisory support and technical training, it is considering that closer collaboration is required with provincial authorities in order to make use of the tools developed<sup>21</sup> and in the context of the country's Millennium Development Goals (MDGs) relating to poverty reduction.

This comprehensive study has been undertaken to assess whether and how these tools can most effectively be incorporated into the rural infrastructure development programmes in NTT province.

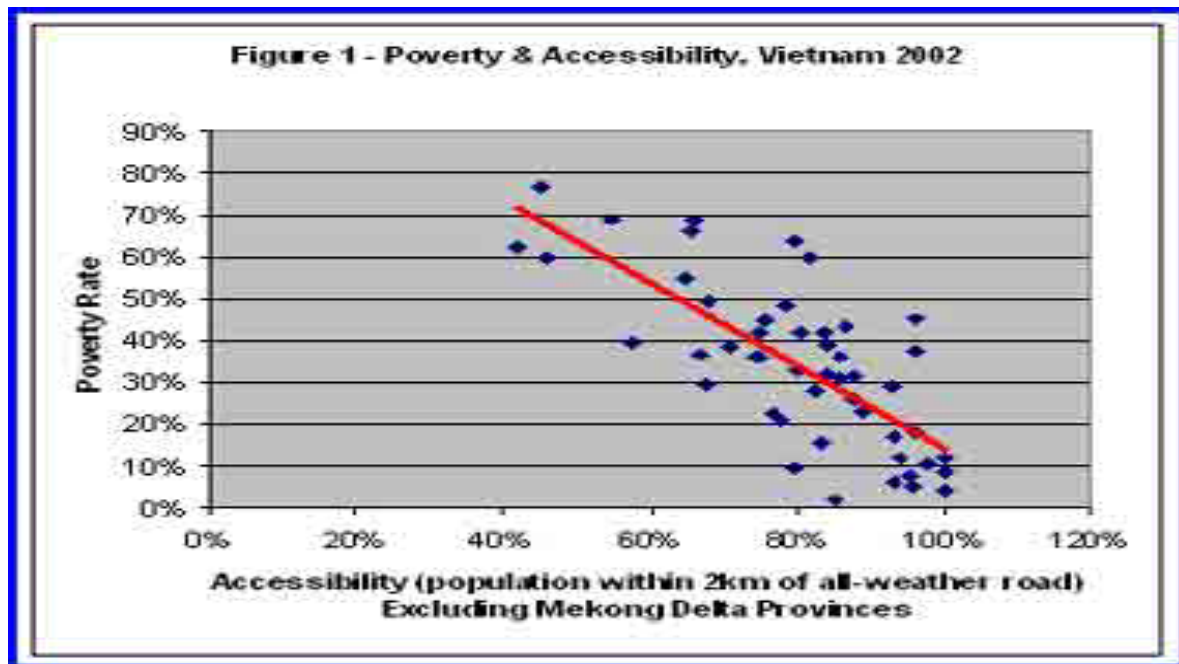
#### **The MDGs for Poverty Reduction and the Crucial Role of Improved Accessibility, Improved Incomes and Improved Governance**

Both the GOI and the UN system have adopted the common framework of the MDGs as the basis for a common programme approach to their programmes. The mechanisms for this are currently being designed in a pilot joint GOI-UN programme in Belu District in NTT and the ILO has a key role to play in at least one of the four key Components of the current programme design.

This key Component of the Belu programme relates to poverty reduction and economic development and through the adoption and use of the ILO-LRB tools developed over the past 20 years.

As is shown in Figure 3.1 below and in many other related studies, there is a direct relationship between poor access and poverty. This is why the ILO programme for improving accessibility, the Integrated Rural Accessibility Programme (IRAP), is the key tool in starting an effective access improvement and local infrastructure development programme in areas with chronic poverty. Not only does the system ensure good local participation and decision making it also contributes significantly to good governance practices.

Figure 3.1



*Source: Vietnam 2002 Living Standards Survey*

Whereas there are many major infrastructure projects in Indonesia which are upgrading, widening, resurfacing and improving roads bridges and structures on major arterial and provincial roads, regrettably many of these huge investments do not necessarily improve access and connectivity for the rural poor who remain relatively physically and economically isolated when these multi-million investment programmes are done.

In contrast the ILO approach incorporates local level planning which focuses on improved access and mobility for the rural poor as part and parcel of such designs.

### **Choosing the Most Appropriate Technology for Specific Infrastructure Works**

The second of the ILO key tools or approaches focuses on a more careful selection of the most appropriate technology for the execution of the infrastructure works, be it rehabilitation, new construction or maintenance. In choosing the most appropriate technology emphasis is given to meeting the minimum technical quality standards and also to the optimization of job opportunities; an area often overlooked by designers when packaging contracts and not noticing the unique socio-economic setting of very high unemployment and relatively low labour costs.

The choices of technology available range from Labour-Intensive (LI) approaches (labour and hand-tools only and obviously only suitable for a very limited range of simple works) to Equipment-Based (EB) technology which is the conventional approach in developed countries where high labour costs make it imperative that labour-saving and equipment-intensive work methods are utilized to the maximum extent.

The ILO and other organizations have also developed an intermediate range of technologies where there can be a varying balance of labour and appropriate equipment according to the technical specifications of the particular work and the availability of local resources. Here the choices are between Labour-based, Equipment Supported (LBES) work methods where small to medium sized equipment is used alongside a suitably expanded work-force, or what has now be coined Modified Equipment-based (MEB) work methods whereby specific components of a conventional EB project or programme are earmarked for execution using either LBES or LI work methods.



The ILO awareness raising programme explains clearly the appropriate application of each technology and also provides essential technical training for those involved from supervisors, technicians, engineers and managers to contractors and consultants. The ultimate goal is to attain a technology balance or technology equilibrium which as objectively as is possible reflects the real political, economic, social, financial, technical and environmental parameters affecting technology choice situation at the time the technology is chosen. Naturally as these parameters change over time so too should the technology which is most appropriate to those new circumstances.

### Conceptual Framework

Table 3.1 below illustrates the impact of using the ILO approaches. Not only are there direct benefits from improved accessibility as a result of this conceptual thinking but there are also the immediate benefits of improved governance as local decision makers realise that they are dealing with more than just funds for infrastructure.

The obvious benefits of using a more labour-enhanced approach to the implementation of the works can result in as many as five times the number of local workers being able to be engaged in the works as a result of an adjustment in the balance between labour and equipment.

The obvious benefits of budgeting for the protection of investment in infrastructure through effective maintenance arrangements and provisions are long-term cost savings and reduced vehicle operating costs.

Table 3.1: Conceptual Framework

Objective; MDG Poverty Reduction			
Internal Strategies	Improved Accessibility	Improved Incomes	Improved Governance
<i>Incorporation of ILO developed Approaches</i>			
Integrated rural accessibility planning	√		√
Labour-enhanced work methodology	√	√	√
Contractor development	√	√	√
Assets maintenance systems	√	√	√

### 3.2 Overall Objective

The main purpose of this rapid assessment has been to enable the process of formulating a technical cooperation programme between the ILO and the Government of Indonesia for improving the delivery of rural infrastructure through methods promoting local-resource based (LRB) approaches including the use of employment-intensive works technology, private sector involvement and integrated rural accessibility planning.

The work involved participation in the joint GOI/UN agencies workshop developing a joint programme for poverty reduction in Belu District in NTT. The team made a presentation to the GOI/UN workshop on LRB approaches in the context of a poverty reduction programme. The team also facilitated a provincial workshop on the mission findings and this was held in Kupang under the chairmanship of BAPPEDA. At the conclusion of the mission the ILO convened a "way forward" meeting of stakeholders in Jakarta to review and discuss the findings of the mission teams who went to NTT and Maluku provinces.

The NTT assessment has two purposes:

- To provide an analysis of the current situation in terms of access to basic services and markets in the rural areas and on this basis make projections on rural transport infrastructure development demands, assess implementation capacity and identify key challenges facing the sector and
- To identify entry points for an ILO technical cooperation programme on the basis of the above situation analysis in the selected provinces.

### **Mission Process**

The mission process required careful coordination with the key stakeholders already involved in rural infrastructure development and maintenance in NTT including relevant ministries and agencies as well as related efforts carried out by donors as well as the international development banks.

Taking note of the decentralised responsibility for provision and maintenance of rural infrastructure to local government authorities, this study carried out the following overall activities:

1. A review of ongoing rural infrastructure investment programmes and current development objectives and goals;
2. A review the employment generation and community involvement measures already in place in existing rural development programmes;
3. An overview of the main actors involved in its implementation;
4. Consultations with planning and implementation authorities at provincial and district levels to establish a comprehensive understanding of the challenges facing the sector;
5. Facilitation of both a provincial as well as a national workshop with available interested stakeholders.

## **3.3 Situation Analysis**

### **Nusa Tenggara Timur Province**

Nusa Tenggara Timur (NTT) province is one of 30 provinces in Indonesia and consists of 16 districts and 563 islands and has a population of 4,355,121 with a population growth rate of 2.3% per year.

Of the 16 districts or regencies of NTT six are located in West Timor and there are nine inhabited islands including Flores<sup>22</sup>, Sumba, Palue, Komodo, Alor, Solor, Adonara and Lembata. The table below lists all of the districts, district capitals, sub-districts and villages in NTT.

Table 3.2: Number of District and Villages by Regency

No	District or Regency	District Capital	Sub-District	Village
1	Sumba Barat	Waikabubak	13	152
2	Sumba Timur	Waingapu	19	190
3	Kupang	Kupang	29	241

4	Timor Tengah Selatan	So'e	21	215
5	Timor Tengah Utara	Kefamenanu	9	163
6	Belu	Atambua	17	206
7	Alor	Kalabahi	17	175
8	Lembata	Lewoleba	8	128
9	Flores Timur	Larantuka	13	219
10	Sikka	Maumere	11	160
11	Ende	Ende	16	211
12	Ngada	Bajawa	16	174
13	Manggarai	Ruteng	12	254
14	Rote Ndao	Ba'a	6	80
15	Manggarai Barat	Labuan Bajo	5	121
16	Kota Kupang	Kupang	4	49
Total			216	2738

### Climate

As is the case in the rest of Indonesia, NTT has only two distinctive seasons; a dry season and a rainy season. The dry season is generally from June - September and the wet season last from December – March.

### Geography

The total land area of NTT is 47,349.9 sq. km. which are spread over 566 islands (42 inhabited and 524 non-inhabited). NTT is mainly hilly and mountainous and has relatively little flatland. The result is a relatively low level of agricultural productivity from very marginal "dry-farming" practices and the general lack of water for agriculture.

### Population

The 2006 population census placed the total population at 4,355,121 persons, with a population density of 91.98 persons per square kilometre.

According to the statistics relating to the distribution of population by regency or district, the population of NTT was concentrated in Manggarai on the island of Flores (11.37 percent), followed next by Timor Tengah Selatan (TTS), Sumba Barat, and Belu with almost 10 percent.

The largest population density is in Kota Kupang Regency (around 1.741 person per km<sup>2</sup>), while the lowest population density is in Sumba Timur Regency (31 person per km<sup>2</sup>). Other regencies which have the high population densities (up to 100 people per km<sup>2</sup>) were Sumba Barat, TTS, Belu, Flores Timur, Sikka, Ende, and Manggarai Regency. .

The total fertility rate of 4.1 children per women is well above the national average of 2.6.

**Table 3.3: NTT Population, Total Area, and Population Density by Regency 2006**

No	Regency	Population	Area (Km2)	Population Density
1	Sumba Barat	409,851	4,051.92	101.15
2	Sumba Timur	217,454	7,000.50	31.06
3	Kupang	362,790	5,898.26	61.51
4	Timor Tengah Selatan	412,353	3,947.00	104.47
5	Timor Tengah Utara	209,037	2,669.66	78.30
6	Belu	394,810	2,445.57	161.44
7	Alor	177,009	2,864.60	61.79

8	Lembata	102,344	1,266.38	80.82
9	Flores Timur	225,268	1,812.85	124.26
10	Sikka	275,936	1,731.92	159.32
11	Ende	237,555	2,046.62	116.07
12	Ngada	250,305	3,037.88	82.39
13	Manggarai	495,136	4,188.90	118.20
14	Rote Ndao	110,617	1,280.00	86.42
15	Manggarai Barat	195,532	2,947.50	66.34
16	Kota Kupang	279,124	160.34	1,740.83
Nusa Tenggara Timur		4,355,121	47,349.90	91.98
2006		4,260,294	47,349.90	89.97

### Why consider Nusa Tenggara Timur province?

According to the work undertaken for the preparation of the Joint Millennium Development Goals Joint GOI/UN programme Framework, NTT is one of the poorest provinces in Indonesia. That in itself is sufficient reason for priority to be given to NTT.

And the proportion of people living below the national poverty line<sup>23</sup> is nearly 30% compared to a national average of 18%. The poverty trend is also getting worse; since 1999, NTT has dropped from 21st to 24th in the Human Poverty Index (HPI) ranking of Indonesia's 30 provinces and from 24th to 28th in the Human Development Index (HDI) ranking.

There are significant differences in the status of development between districts in NTT. The lowest ranked districts by HDI are West and East Sumba at 53 and 56 respectively compared to an NTT average of 60, while the poorest districts according to the HPI are West Sumba, Lembata, Manggarai at 38, 34 and 33 respectively compared to an NTT average of 28.

There are also significant differences between districts in the proportion of people without access to health facilities (ranging from 6% in Kupang to 62% in Manggarai); in illiteracy rates (ranging from 2% in Kupang to 28% in West Sumba); and in the proportion of under nourished children under five (ranging from 32% in Manggarai to 50% in Southern Central Timor). Alor District has a significantly lower Gender Development Index score of 38 compared to an average of 56 in NTT and 59 for Indonesia as a whole.

As in other provinces, the on-going decentralisation has the potential to make the provision of public services at the local level more responsive to local needs; an essential prerequisite for achieving localized MDGs. Moreover, decentralisation does not only affect government and the civil service, but is conditional on the involvement of communities, NGOs and stakeholders in the private sector.

### Ex-refugees from East Timor

In preparing their work for the joint GOI/UN programme in Belu district it was recognised that ex-refugees of former Timor Timur (now Timor Leste) form yet another vulnerable groups in NTT. They are mainly living in West Timor especially in three Kabupaten: Kupang, TTU and Belu.

Most of the ex-refugees are already living in new settlement units scattered in the three Kabupaten. These settlement units were mainly built through a joint program between the Government of Indonesia and UNDP and other donors up to 2005. However, there are more than 8,000 households who are still living in camps in Belu and Kupang. They live in camps in Tuapukan, Noelbaki, and Naibonat in Kabupaten Kupang. Also in Timor Tengah Utara, there are about another 4,000 households (government version) or 2,000 households (NGO version) who are still in camps.

According to a representative of an NGO, the living conditions of the ex-refugees in West Timor are still “not very good” Those who live in camps are called “sangat miskin” (very poor) by local government.

Many of the ex-refugees do not appear to have adequate land for undertaking agriculture. Some grow crops such as corn and vegetables, but mainly only in their yard around temporary house. Some sustain their lives by becoming small traders selling everyday needs locally and work “whatever they can do” (kerja serabutan) to sustain their lives while they do get support from the GOI such as cheap rice for the poor people (raskin). However, many ex-refugees feel they face “discrimination” as they are not involved in village head voting process<sup>24</sup>.

### Employment in NTT

NTT suffers from a high level of un and under-employment, a generally low level of labour productivity, relatively low wage levels and according to the Ministry of Manpower low levels of awareness regarding occupational safety and health (OSH).

According to data from the Bureau of Statistics and the Ministry of Manpower, the 2006 National Labour Force Survey, the number of persons aged 15 years and over was 2,753,967 person and only 74.36 percent of them were in the labour force within which 96.35 percent were actually working and 3.65% were looking for work.

As shown in Tables 3.4 and 3.5 below, the total labour force in the 2006 survey was 1,973,187 people and about 692,512 people or 35.10 percent of them were unpaid workers and around 70.85 percent (490,621 people) of the unpaid workers were female.

Table 3.6 below shows the main economic sectors of the working population as the agricultural sector (70.57 percent), the services sector (9.38 percent), the manufacturing industries sector (7.90 percent) while 5.97 percent worked in the trades sector.

Other sectors such as mining and quarrying, construction, transportation, and communication sector accounted for only 1 to 3 percent.

Table 3.4: Population Aged 15 Years and Over by Type of Activity during the week prior to the 2006 National Labour-force survey

Activity During the Previous Week	Numbers	Percentage
I. Economically Active	2,047,931	74.36
1. Working	1,973,187	71.65
2. Looking for Work	74,744	2.71
II. Not Economically Active	706,036	25.64
1. Attending School	201,374	7.31
2. House Keeping	352,386	12.80
3. Other	152,276	5.53
Total	2,753,967	100.00
2006	2,714,054	100.00

Table 3.5: Population Aged 15 Years and Over versus Main Employment Status of workers during the week prior to the 2006 National Labour-force survey.

Main Employment Status	Male	Female	Total
1. Self Employed	212,523	137,511	350,034
2. Self Employed Assisted by Family	456,048	139,780	595,828

Member/Temporary/Unpaid Worker			
3. Self Employed Assisted by Paid Worker	23,400	9,162	32,562
4. Employee	165,417	92,897	258,314
5. Free Lancer in Agriculture	15,842	9,714	25,556
6. Free Lancer in Non Agriculture	13,957	4,424	18,381
7. Unpaid Labour	201,891	490,621	692,512
Total	1,089,078	884,109	1,973,187
2006	1,135,328	903,247	2,038,575

Table 3.6: Population Aged 15 Years and Over by Main Industry 2006

Main Industry	Numbers	Percentage
1. Agriculture, Forestry, Estates, Fisheries	1,392,407	70.57
2. Mining and Quarrying	10,855	0.55
3. Manufacturing Industry	155,856	7.90
4. Electricity, Gas and Water	2,131	0.11
5. Construction	33,846	1.72
6. Wholesale and Retail Trade, Restaurant Trade	117,806	5.97
7. Transportation, Communications	61,939	3.14
8. Finance, Insurance, Real Estate and Construction	11,200	0.57
9. Public Service	185,089	9.38
10. Others / Non Stated	2,058	0.10
Total	1,973,187	100.00
2006	2,038,575	100.00

Table 3.7: Population Aged 15 Years and Over Who Worked During The Previous Week by Education 2006

Educational Attainment	Numbers	Percentage
Never / Not Yet Attended School	137,085	6.95
Did Not Complete / Not Yet To Complete Primary School	459,144	23.27
Primary School	891,916	45.20
Junior High School (General)	228,807	11.60
Senior High School (General)	132,406	6.71
Senior High School (Vocational)	71,087	3.60
University	52,742	2.67
Total	1,973,187	100.00
2006	2,038,575	100.00

## Wages

The provincial minimum monthly wage in Rupiah for East Nusa Tenggara province in 2007/25 is 600,000 and for West Nusa Tenggara is 645,000 and the minimum wage for East Nusa Tenggara is expected to rise to 650,000 in 2008.

There has however been an interesting study undertaken in nearby Lansak Kabupaten on 2004 data and the results of that survey in Table 9 below indicate a considerable gap between the minimum wage and the market wages in agriculture.

Table 3.8: The Wages Indices in the Informal Sector for Quarter IV-2004 in Kabupaten Landak, (Quarter 3 – 2004 = 100) In Rupiah per Day

Economic Activity	Quarter 3	Quarter 4	% Changes
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	Nominal	Real	Nominal	Real	Nominal	Real
<i>Wages of Food Crops</i>						
1. Wage of Hoeing	16,733.3	16,733.3	17,133.3	16,124.0	2.4	-3.6
2. Wage of Planting	14,666.7	14,666.7	14,944.5	14,064.0	1.9	-4.1
3. Wage of Weeding	15,500.0	15,500.0	16,916.7	15,920.1	9.1	2.7
4. Wage of Harvesting	15,518.5	15,518.5	16,277.8	15,318.8	4.9	-1.3
<i>Wages of Estates (smallholder plantation crops)</i>						
1. Wage of Hoeing	21,300.0	21,300.0	21,600.0	20,327.5	1.4	-4.6
2. Wage of Planting	19,083.3	19,083.3	20,250.0	19,057.0	6.1	-0.1
3. Wage of Weeding	17,611.1	17,611.1	20,277.8	19,083.2	15.1	8.4
4. Wage of Harvesting	19,185.2	19,185.2	21,888.9	20,599.4	14.1	7.4

### Access and Accessibility

The total length of NTT roads in 2006 was 17,079 km. Of this total 1,273 km were under state responsibility; 2,939 km were under provincial responsibility and the rest 12,867 km were under local responsibility.

The longest road was in Manggarai Regency. It was about 12.84 percent of total length of NTT roads and the currently planned longest road will in fact be the World Bank supported Trans Flores Highway expected to be designed in 2008.

In 2006 the recorded number of motor vehicles was 109,723 units. The composition of the number of motor vehicles by type in 2006 was 92,730 units of motorcycles; 4,914 units of jeeps/station wagon; 4,667 units of mini bus/microbus; 7,412 units of truck, pick-up and tractor.

Table 3.9: Length of Road by Regency 2006

No	Regency	State	Provincial	Local authority	Total km
1	Sumba Barat	134.31	194.84	831.18	1,160.33
2	Sumba Timur	35.97	432.72	1,101.40	1,570.09
3	Kupang	56.83	404.82	1,169.19	1,630.84
4	Timor Tengah Selatan	108.29	307.34	1,157.90	1,573.53
5	Timor Tengah Utara	45.99	150.34	800.30	996.63
6	Belu	91.80	156.12	678.43	926.35
7	Alor	104.20	68.00	832.03	1,004.23
8	Lembata	-	52.45	608.80	661.25
9	Flores Timur	100.16	176.89	577.38	854.43
10	Sikka	97.88	109.90	748.73	956.51
11	Ende	130.79	160.30	824.50	1,115.59
12	Ngada	107.08	347.16	1,218.05	1,672.29
13	Manggarai <sup>26)</sup>	214.40	283.22	1,695.38	2,193.00
14	Rote Ndao	-	84.71	-	84.71
15	Kota Kupang	45.32	10.40	623.54	679.26
	Total	1,273.02	2,939.21	12,866.81	17,079.04

## **Maritime Sector**

NTT consists of more than 40 isolated main islands; therefore sea transportation is important and strategic to support population mobility and to distribute trade from one island to another. In 2006 the number of ship visits by port in NTT was 1,778,674.

Flores Timur Regency has the most ship visits (511,973 visits), followed by Kupang Regency in the second place (395,242 visits)

In 2006, the number of passenger embarked was 2,398,977 passengers and the largest volume of the loaded/unloaded cargo and cattle by port was in Tenau port (Kupang). The actual tonnage of unloaded cargo amounted to 753,384 tons, while number of unloaded cattle was 775,990.

## **Aviation Sector**

The number of aircraft departures and arrivals in 2006 increased significantly (by 61.15 % compared to 2005), with 9,778 aircraft arrivals. Likewise the number of passenger arrivals increased, from 258,319 persons in 2005 to 354,068 persons in 2006.

In 2006 volume of the air-cargo loaded and air-cargo unloaded in NTT also increased over 2005 figures with the volume of cargo loaded reaching 5,672.76 tons or an increase of 37.24 percent over the 2005 figures.

## **Roads**

In terms of the roads sector NTT is fairly well served however the standard 4 to 5 metre width pavement seems to be standard irrespective of whether the road is a national, provincial, municipal or district road. Generally the roads are in poor condition and receiving inadequate maintenance especially the district level roads. Likewise the public transport sector is not well developed so mobility for the rural poor is limited. As is shown in the data above motorcycles represent 90% of all registered motor vehicles, reflecting the level of private transport affordability for the greater population.

In the education and health sectors, NTT is also well behind national averages in terms of performance indicators:

46% of the population are still without access to clean water while 32% do not have access to health facilities<sup>27</sup>.

The need for improved accessibility has been identified by the GOI/UN Joint programme being developed for Belu District as a major poverty reduction challenge.

## **Current Local Level Planning Processes.**

The GOI has produced a 2006 - 2010 Medium Term Development Plan (MTDP) and this plan together with its Poverty Reduction Strategy Paper (PRSP) comprises the key current overall planning documents.

## **Local Government Poverty Reduction and Planning Committees**

Following the adoption of the MTDP and the PRSP the GOI encouraged<sup>28</sup> provincial and district governments to form their own local KPK committee and to draft their own local PRSP strategies.



Community participation is an essential part of the KDP programme with active participation from the poor generally and usually more than 50% representation from women. The KDP planning process involves both village and inter-village fora, open meetings and discussions of ideas, special women's meetings, two accountability reports and special meetings for handing over of completed assets and the determination of maintenance arrangements for the completed assets.

Officials from a number of ministries have visited provinces and Kabupaten to encourage them to draft poverty strategies, to explain the functions of such committees and what the local poverty reduction strategies should look like.

By early 2007 a total of 30 provinces (out of 32) had formed KPK-D committees and 14 have prepared their own province-level draft PRSP-D strategy documents. At district level, a majority have formed KPK-D poverty reduction committees (316 out of 437 districts) but only 99 of the 437 have prepared PRSP-D strategy statements.

Local level planning is now viewed within these local poverty reduction strategies and there appears to be a high level of local participation in the planning processes.

The GOI has a well established albeit under-resourced provincial and district level planning process which follows established national guidelines.

There is currently an important Asian Development Bank (ADB) technical support programme being provided to BAPPEDA and covering selected provinces including 11 Districts in NTT, South Sumatra and Central Java. This technical assistance programme focuses on pro-poor planning and budgeting. Part of the strategy for this ADB project is the identification of essential infrastructure needing improvement and support for community development/empowerment and socialization.

While this ADB project represents a much larger technical support element to BAPPEDA than was previously provided by the ILO it nonetheless follows similar principles and represents a possible entry point for ILO aiming at strengthening improved accessibility and local governance and linking the improved accessibility planning with available infrastructure budgets. The ADB project has developed a district planning and budgeting process which is being trialled.

The NTT Government has prepared a number of key documents and assessments which were unfortunately not sighted by this mission however they include:

- The Development Program of East Nusa Tenggara Province for 2004-2008,
- NTT Governor's Decree No.78/Kep/HK/2006 regarding the establishment of the Team for Poverty Alleviation Coordination,
- NTT Province Poverty Reduction Strategy for the Years 2004-2010,
- Kabupaten Kupang Government Strategic Plan [RENSTRA] for 2004-2009,
- Kabupaten Kupang Bappeda and Government Regional Development Strategy of Disadvantaged Region of NTT,
- Kabupaten Kupang Government Guidelines for Community Empowerment Program Implementation of Kabupaten Kupang and
- Kabupaten Kupang Government Guidelines for Sub-districts Rural/Urban Development Program Implementation [BPKDK].

### **Belu District, NTT**

The current planning for the GOI/UN Joint programme in Belu District has as its foundation the MTDP and the PRSP as developed for the local district. In refining and further developing the joint programme, the ILO is intending to play a critical role in the component

dealing with economic growth and poverty reduction specifically through the development of IRAP programmes in five villages and then the identification of local infrastructure priorities which would be implemented using local resources and through labour-based approaches for construction, rehabilitation and maintenance.

Although Belu District is probably one of the poorest districts in NTT, it is none the less a microcosm of the real situation in NTT at district level and with the amount of genuine UN partnership expertise and resources being assigned to this joint programme it will be imperative that ILO ASIST-AP is fully engaged there so that there can be a high profile model of best practice which comes out of the joint programme and is worthy of replication elsewhere in NTT.

### **Previous ILO Support to NTT**

The ILO ASIST-AP project has already worked with three districts in NTT: one in Flores and two in West Timor to assist them introduce local accessibility planning through its Integrated Rural Accessibility Programme (IRAP).

Unfortunately when ILO technical support ceased in West Timor so did the work related to IRAP, partly it seems as the improved accessibility processes were not fully integrated into the regular local planning system. The local staffing and other resources of the district planning offices remain under-strength.

Kabupaten Development Program - National Community Empowerment Program (KDP - PNPM).

The PNPM was described by an AusAID official as the largest poverty reduction programme in the world.

The KDP World Bank and donor supported programme is the largest Government programme operating at district level in NTT and will become even larger as it merges with other existing programmes (including P2KP - Urban PU works, P2DTK - Projects in Disadvantaged regions and PPIP - the Rural Infrastructure Improvement Programme) to form the new National Community Empowerment Program (PNPM) in 2008.

According to the 2006 KDP evaluation report the actual types of infrastructure in the 2006 programme review was mainly rehabilitation and resurfacing of existing roads (65%), other roads (25%) with much smaller components assigned to irrigation, water supply, public sanitation and other infrastructure.

The most recent report from the NTT Public Works relating to the 2006 NTT Rural Infrastructure Improvement Programme (PPIP) component of the KDP, identifies 581 target villages to be included in the programme. These villages are spread over 15 districts as shown in Table 3.10 below. Most of these works involved improvements and maintenance to rural roads as well as irrigation and drinking water supply projects. In Table 3.11 below the budget allocations for various activities of the BPKDK - NTT sub-district and village development programme under KDP are described for the years 2004 - 2006. These activities included: rural road pavement improvements, new roads, drinking water supplies, new rural schools, development offices and public meetings, drainage and irrigation works, flood protection and dykes

Table 3.12 describes the road improvement activities undertaken in Kupang District in 2007 under the PPM - the Community Empowerment programme; yet another component of the old KDP.

Table 3.10 Profile of the NTT PPIP 2006

No	District	Number of villages	DIPA 2006 (Rp)		
			Infrastructure	Operational cost of OMS	Total
1.	Sumba Barat	39	9,750,000,000	70,200,000	9,820,200,000
2.	Sumba Timur	38	9,500,000,000	68,400,000	9,568,400,000
3.	Manggarai Barat	38	9,500,000,000	68,400,000	9,568,400,000
4.	Manggarai	47	11,750,000,000	84,600,000	11,834,600,000
5.	Ngada	42	10,500,000,000	75,600,000	10,575,600,000
6.	Flores Timur	36	9,000,000,000	64,800,000	9,064,800,000
7.	Lembata	38	9,500,000,000	68,400,000	9,568,400,000
8.	Alor	36	9,000,000,000	64,800,000	9,064,800,000
9.	Ende	40	10,000,000,000	72,000,000	10,072,000,000
10.	Sikka	37	9,250,000,000	66,600,000	9,316,600,000
11.	Rote Ndao	38	9,500,000,000	68,400,000	9,568,400,000
12.	Kupang	40	10,000,000,000	72,000,000	10,072,000,000
13.	TTS	38	9,500,000,000	68,400,000	9,568,400,000
14.	TTU	36	9,000,000,000	64,800,000	9,064,800,000
15.	Belu	38	9,500,000,000	68,400,000	9,568,400,000

Table 3.11: Budgetary Profile of the BPKDK Programme in NTT.

YEAR	NUMBER OF VILLAGE	FUND (Rp. Billion)	NUMBER OF ORCHARD	FUND (Rp. Billion)	TOTAL FUND (Rp. Billion)
2004	22	1.1	240	6	7.1
2005	22	1.1	240	6	7.1
2006	29	1.45	480	12	13.45
TOTAL		3.65		24	27.65

Table 3.12: Road Construction Activities undertaken through the Community Empowerment Programme (PPM), Kupang District in 2007.

Road construction	KM	Budget (Rp.)
Rural Road in Soba	1.2	402,840,000
Middle Kupang Sub-Regency Chief Office Entrance access	1.1	369,270,000
Tourist access Onesu	2.5	551,000,000
Road Hansisi – Huilelot	0.252	93,900,000
Road Uitao - Bokonusan	0.260	96,980,000
Total	5.312	1,513,990,000

An important part of the KDP-PNPM programme is the current use of some 6,000 national consultants to support communities in locally planning and prioritizing their infrastructure needs. In 2008 the number of KDP-PNPM consultants is planned to rise to 12,000 and comprise mainly engineers or technicians. These national consultants receive annual technical training and in turn undertake training of communities in such areas as the development of project management teams, training in proposal writing, training of Kecamatan financial management units, village maintenance teams, village monitoring

teams, training of facilitators, village cadres, as well as specific technical or agriculture related skills for capacity building at local level.

The ILO roads project in Aceh is currently developing a skills building, entrepreneurship support, roads maintenance and a monitoring and evaluation programme for KDP facilitators and community representative which could form a model for replication elsewhere or even at national level as was done in Thailand for the Tambon (local government) technical training programme in the 1990s.

### Recent and Current Infrastructure and Related Programmes in NTT

Table 3.13 summarizes the important current government and non-government programmes outside the PNPM program involving the infrastructure and related sectors. The largest of these are the AusAID ANTARA programme for Poverty reduction which is designed to run over 15 years and the planned roads sector support programme.

Table 3.13: Current and recent Infrastructure and related programmes in NTT.

INSTITUTION	PROGRAM	DONOR (S)	IMPLEMENTING AGENCY	LOCATION
GTZ-Promis-NT (Program Penanggulangan Kemiskinan)	- Local Government - Community (such as agro-processing)		Dept. of Home Affairs (Depdagri)	Kupang, Ende, Alor, Sumba Timur
GTZ-ProAir (Rural Water Supply and Sanitation Project)	- Establishment of water user groups - Community-based participatory planning of appropriate water supply systems - Infrastructure design and construction - Community based planning and building of simple pilot schemes for sanitation	KfW	Indonesian Ministry of Health, GTZ, district authorities, Bappeda, WASPOLA (Indonesian Water Supply and Sanitation Policy Formulation and Action Planning Project)	Kupang, TTS, Sumba Timur, Sumba Barat,
AusAID-ANTARA Assistance for Regional Autonomy	- Poverty reduction - Improved governance - Improved rural and peri-urban incomes - Improved access to basic services - Improved public finance management - Improved food security	AusAID	BAPPEDA	Whole NTT  AUD30M for 15 years

	- Improved political leadership at all levels of government			
AusAID-Indo Infrastructure Initiative  National Roads Sector Upgrade Loan project	Support to road development and maintenance  AUD300M 30 packages or 5 - 10 M Mainly upgrading of existing main roads	AusAID under development  AusAID	PU	Selected provinces
Oxfam GB	Health: Aids for refugees (developing wells, toilets, houses, etc) Ended Nov 2006  Food Security Program	EU	CIS Gamki (Centre for Internally Displaced persons), YPI (Yayasan Peduli Indonesia)	Kupang, Belu  Timor, Flores, Sumba
Swiss Contact	Community Dev.:  Local economic development	AusAID		Flores Timur, Ende, Sikka, Ngada
WVI World Vision Indonesia	Community Empowerment:  a). Agriculture  b). Advocacy  c). Economic dev			Kupang, TTU, Alor, Flores Timur, Sumba Barat, Sumba Timur, Rote Ndao
WFP (World Food Programme)	Community Empowerment:  Food for Work			Kupang, TTS, TTU, Belu Rp92,000 M
UNDP	Focus on Ex-refugees:  1. CDF (Community Dev. Fund) such as: developing roads, schools, wells, providing seeds, livestock, etc  2. ADF (Area Dev. Fund) such as: developing village office, providing agricultural equipments, etc.	EU, US,  DFID and TRAC Fund (for 2006)	Service Public Works (Dinas Pemukiman dan Prasarana Wilayah, Kimpraswil), local NGOs	Kab. Kupang, TTU, Belu  Rp3,157 M  For 2006 the same programs is planned to be financed by DFID and TRUC Fund
PLAN	1. Education	Sponsors	Puskesmas,	Kab. Kupang,

INDONESIA KUPANG	<p>2. Health-clean water &amp; sanitation</p> <p>3. Partnership/ Sponsorship</p> <p>4. Livelihoods</p>	<p>hip AusAID, Global Fund</p> <p>2007/8</p>	Posyandu	TTS, TTU, Lembata, Sikka
ILO	<p>Supporting education, training, and job opportunities for young people</p> <p>Employment intensive infrastructure programme planned</p> <p>Gender &amp; entrepreneurship development; planned</p> <p>Migrant workers, on-going</p> <p>HIV/AIDS planned</p> <p>Elimination of worst forms of child labour , on-going</p> <p>Abolition of Forced labour</p>		<p>Service Labour and Transmigration, NGOs</p> <p>Govt Strategic partners: MONE, DISNAKER</p>	National level Kupang, Ambon, Jayapura
APBN of Kupang	Rural Roads (1999 - 2009)		PPM Rp1.5 Billion 2007	
Polytechnic of Kupang	2008, Training and certification of contractors and consultants personnel		LPJKD	Kupang
IBRD (WB)	Packet 141 - 2008 Improvements to Main roads		PU	
APBN (Central Budget)	Settlement Development Strategy (Strategi Pengembangan Permukiman NTT)		PU Province Roads, Bridges, drainage and housing	
APBN	Integrated housing & utilities support (P2LDT)		BPMD Rp 25,476,407,925	

## **Main Delivery Mechanisms for Development and Maintenance of Infrastructure**

The main mechanism for the delivery of infrastructure works is the private sector while the government infrastructure ministries also retain some equipment for smaller operations, force account activities appear uncommon.

From the accounts given by Public Works and the Construction Services Development Board (LPJK), also closely associated with Public Works, the great majority of the 3,600 contractors in NTT are small contractors and they are not well equipped and have difficulty in gaining access to suitable equipment when running more than one contract.

The team was able to see widening of the main road from Kupang to Belu being undertaken by local contractors who chose to use a combination of heavy equipment for all earthmoving and gravelling operations while they engaged local labour for the construction of associated retaining walls and drainage widening works.

Public Works informed that only a small percentage of each annual roads budget was assigned for maintenance works so that regrettably maintenance was under-funded and works were not necessarily based on a real needs basis or recent detailed road inventory.

The engineer in charge of the Pemerintah Kabupaten Kupang informed the team that there was also a low level of professional development support for his technical staff with only two Public Works staff per Province per year being provided any technical training.

## **Opportunity for ILO TA for Contractor Development**

The Construction Services Development Board known as LPJK (Lembaga Pengembangan Jasa Konstruksi) maintains a register of all consultants and contractors and provides monitoring of their registration and meeting of required technical standards. LPJK is also mandated to provide technical and managerial training for contractors and consultants and some of this work has been undertaken by the Bandung Institute of Technology. There are however no LPJK accredited training providers in NTT although arrangements are now in hand for the local polytechnic to establish technical training courses for technicians on the campus at the university in Kupang.

It was evident that there is a demand for both technical and managerial training for local contractors including also possibly community contractors in NTT and that this was not being met by the National Contractors Association of Indonesia (Laporan Pertanggungjawaban Badan Pimpinan Daerah Gapensi Provinsi) which apparently has more of a role of lobbying for the business interests of its members.

## **Main Government and International Players**

The main government agency involved in infrastructure planning is BAPPEDA and Bina Marga Departemen Pekerjaan Umum (Public Works) is responsible for the implementation of infrastructure works. At local authority level BAPPEDA and the Agency for Rural Empowerment (PMD) operate for the KDP program however communities are empowered to be able to engage contractors directly themselves using the community grants that they have received.

Apart from the national roads sector loan programmes of the World Bank and the ADB in as far as they affect future works in NTT, the largest local programme which could benefit from the ILO LRB approaches to infrastructure planning and execution is the AusAID ANTARA programme and the planning AusAID roads sector programme if it is to operate in NTT.

With the common overarching goal of poverty reduction there appears to be potentially a close compatibility between the AusAID ANTARA and the programmes of ASIST AP. In this respect there should be further consultations especially as the ANTARA programme is a "rolling" programme with flexible options and could well accommodate the ILO "tools" and LRB approaches.

## 4. Capacity Constraints and Challenges

### Assessment of Attainment of Development Goals

The mission found little information on this with respect to the general infrastructure works however from what was able to be seen by the mission and from the results of the 2006 KDP nation-wide evaluation good progress appears to be being made within limited budgets for the infrastructure sector in NTT.

The KDP nation-wide evaluation reports the following selected key results:

Table 3.14: key results from KDP 2006 evaluation

<i>Inputs</i>	<i>Targets</i>	<i>Results for KDP III as at Dec 2006</i>
No of villages with sub-projects	12,000	18,007
% of women in village meetings	40%	43%
% of villages with O & M committees formed	85%	100%
<i>Outputs</i>		
% of agreed work completed	85%	99%
% of national data-base complaints resolved	50%	57%
<i>Impacts</i>		
% beneficiaries who are women	40%	50%
% of beneficiaries who are poor	65%	61%
% of infrastructure reviewed as "Good" or "Excellent"	70%	65%

### Main Implementation Constraints

The main implementation constraints appear to be driven by very modest or even "below-needs" budgets which has been a deterrent to the private sector to size up and invest in the construction sector equipment needs.

The team also learned that some local communities have received funds for local development but have not proceeded any further as they were unsure of proper accounting and technical procedures. The KDP evaluation does not however reflect these views and a closer examination at the financial management system is needed to better identify this as a key constraint.

The institutional setting for the planning, design and implementation of local development works appears to be quite satisfactory after one takes into account the general lack of technical expertise available at village level and the lack of incentives to address this situation.

There did not appear to be any difficulty with policy issues at local level which prevented the wider and improved use of local resource-based approaches, for small infrastructure works, however at central and district level current technology choice issues as reflected in the way



work is specified and contracts are packaged suggest that there is a need for a technical review of the current contracting guidelines with a view to a more liberal approach which facilitated the use of more labour-enhanced work methods in infrastructure programmes.

### **3.5 Possible Mitigation Measures to Address Challenges**

#### **Additional resources needed for improved implementation**

AusAID ANTARA is looking at the general area of financial management and the GOI is expanding the KDP programme in 2008.

Apart from the need for even further capital investment funds; there is an obvious need for further technical and managerial training for local GOI personnel, contractors, consultants and key community representatives to make better use of available funds. Such training needs should be professionally assessed especially in BAPPEDA, the PU and the contracting sector and draw on the work undertaken by ILO ASIST-AP in 1999/2000.

A review of the current technical guidelines and specification as used by all of the infrastructure Ministries is also urgently called for and this would update the work undertaken by ILO ASIST-AP in 1999/2000.

The mission was not able to obtain road inventory information regarding the condition of rural roads but did gain a superficial impression of a great deal of work being required to improve physical access for the rural poor who also struggle with access to basic services especially clean drinking water.

As is indicated in the breakdown of road categories above, 12,866 km of the total network of 17,079 km are local or rural roads. There is clearly a great scope for improving and maintaining these roads, however the levels of poverty are such that road improvements alone without support also for providing other basic services and facilities will not be enough to improve overall accessibility challenges. A thorough assessment of improved accessibility needs is essential prior to embarking any roads sector improvements.

In this respect the GOI/UN Joint programme model for Belu District which proposes IRAP planning in five villages followed then by locally decided infrastructure improvements including roads, will provide the ILO as a member of the GOI/UN Joint team with a model of best practice and a firm basis for replication elsewhere in NTT.

### **6. Viability of LRB Approaches of the ILO**

There is undoubtedly a place for improved and further use of the ILO LRB approaches in NTT province. There is also a good basis on which to build through the ILO linking up with either an existing or planned major programme whereby the ILO "added value" involves essentially technical assistance on the back of existing or committed capital investment streams for infrastructure works.

It is however important to accept that elements of the LRB approach are already being practiced in NTT infrastructure and planning programmes and it would not be appropriate to establish parallel systems but rather build on and improve existing systems.

The challenge for the ILO will be to achieve the realization of its LRB models without being overcome by the major need to address basic technical managerial and planning needs which are likely to be technology neutral or technology insensitive.

This is because of the daunting overall need for basic skills improvement especially at district and village level where general capacity building support may well be more welcome than specialist technical support for LRB approaches. That is unless it is presented in the context of what it really is: a poverty reduction approach with a tailor made set of technical tools which avoid the pitfalls of what could otherwise be "jobless growth" when major investments are made in infrastructure programmes.

The need and potential for contractor development is very evident and again probably more in the setting of overall technology neutrality or multi-technology needs.

And here lies the challenge: whether to offer assistance at the upstream or downstream ends of the infrastructure cycle or at both. To be located only downstream with a programme of support does not necessarily result in the sustainability of other than the actual works designed and built.

A much wider and lasting impact can be realized through the institutionalization of these approaches so that many more millions can benefit from such an ILO initiative.

# Annex A

## DRAFT PROJECT CONCEPT NOTE

<b>Province</b>	Papua
<b>Project Title</b>	Support for RESPEK

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### Basic information

1.1 The region of Papua is Indonesia's, easternmost, largest and most sparsely populated region. Ever since its integration into Indonesia in 1969, Papua has been troubled by separatist movements and social unrest. Following Indonesia's transition towards democracy and decentralization in the late 1990s, the Special Autonomy Law for Papua was passed in 2001. This was aimed at solving the ongoing conflict and accelerating the economic development of the region.

1.2 In revenue terms, Papua is one of the wealthiest provinces in Indonesia, with substantial income from mining) and from forestry. Yet it also suffers from the highest rates of per capita poverty in Indonesia – with over 80% of the households living below the poverty line. Much of this poverty is concentrated in remote rural areas. Institutions for service delivery at a local level remain chronically under-resourced. A third of Papuan children do not go to school. Nine out of ten villages do not have a health centre, doctor or midwife. Infant mortality is significantly above the national average (56 as opposed to 35 per 1000) and the province suffers from the highest per capita rates of HIV/AIDS in Indonesia.

1.3 Progress in Indonesia towards achievement of the millennium development goals (MDGs) is encouraging. The Government of Indonesia's (GoI) 2005 report on the MDGs is generally optimistic. The report does demonstrate, however, that progress is uneven amongst the country's provinces and that Papua province presents a particular challenge for achieving the MDGs.

1.4 Delivery of rural infrastructure has been a particular problem. Different levels of government have been uncoordinated and top down in their approach so that the infrastructure that has been built has not been seen as relevant by villagers and they have lacked "ownership". Many NGOs are active. The most significant donor programme has been the Kecamatan Development Programme (KDP) an Indonesia wide programme funded by the World Bank. Even the KDP has been only moderately successful and has not penetrated into the more isolated regions of Papua.

1.5 The first directly elected Governor of Papua took up his post in 2006. He has stated that he wishes to see government in the province transformed from top down to bottom up community based planning. He is leading the development of a new strategic programme for community-based village development (RESPEK), focusing on nutrition, education, health, and village infrastructure. In Papua

RESPEK will replace the KDP although KDP will continue to fund training and other technical assistance (TA) for the programme.

1.6 The centre piece of the programme is the allocation of an average of Rps 100million (\$11,000) to all kampongs (actual amount varying according to the kampongs population) and provision of support to the villages from kecamatan level. (a kecamatan has 5-7 villages).

1.7 At least 15% of each kampongs allocation must be spent on gender issues and 10% can be spent on transport and administration. The remainder must be spent on development by the village. Like KDP, RESPEK is open menu and the funds could be spent on water supply, transport or even the repair of school furniture. There is a strictly defined participatory process for ranking proposals and the kecamatan chief must approve the proposals.

1.8 Donors are generally supportive of the programme although there is concern about capacity to spend the funds effectively. Funds were disbursed to the kampongs in August 2007 although the approval and support mechanisms in the kecamatan were not yet in place.

1.9 There are 283 kecamatan in Papua. Each will have two social facilitators and one technical facilitator to provide support to the RESPEK programme in its 5-7 Kampongs. Many of the facilitators are simply transferring from the KDP programme and some training is already ongoing. There is a need for an additional 115 technical facilitators to be trained in a programme due to begin in March 2008 and ILO has been asked to be part of the training programme. A total of \$400,000 is available for the overall training courses for social and technical facilitators. Details of the training are to be agreed at a meeting in "mid February" in Papua.

### **Significant policy, Design & implementation issues**

The RESPEK programme is strongly supported by donors although there are doubts that Papua provincial government has the capacity to undertake it effectively. The proposed training of technical facilitators would be fairly low level and would have little influence on those who are already trained. (Suggestions that they should be given refresher courses were rejected on cost grounds.)

This is not training in conventional LBAT that is ILO ASIST's comparative advantage. Rather it is in a broad range of skills that could support the full range of minor infrastructure with a strong emphasis on water supply. The intention is that the technical facilitators trained would be able to support the kampongs in designing and implementing the work they had chosen.

The trainees would be senior high school graduates. A six month training course at this level would produce individuals with only the most basic grasp of what was needed.

Details of the training are to be agreed at a meeting in "mid February in Papua. ILO ASIST must send

a trainer to this meeting if it intends to participate in the programme. The training will be in Bahasa Indonesia and use of an interpreter is not an option.

### **Consultations**

There must be internal ILO consultations and consultations with the principal stakeholders in Papua province

### **Projected Timetable of Steps to Project Approval**

The expected timetable to approval is as follows:

Design Meeting	Apr 2008
PCN Finalised	May 2008
Project Approved	Jul 2008
Training Starts	Aug 2008

## Draft Logical Framework

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p><b>Goal:</b></p> <p>1 MDGs are met in Papua province.</p>			
<p><b>Purpose:</b></p> <p>RESPEK is implemented effectively in Papua province.</p>	<p>1 RESPEK funds spent effectively and resulting infrastructure is maintained by communities.</p>	<p>1.1 Training Records</p> <p>1.2 Evaluation</p>	<p>Other investments made as needed.</p>
<p><b>Outputs:</b></p> <p>1. Technical facilitators capable of ensuring RESPEK funds are spent sustainable.</p>	<p>1. 115 Senior High School Leavers pass training course and are employed in RESPEK.</p>	<p>1. Project reports and reviews.</p>	<p>1. Training in planning and other issues for RESPEK programme is effective.</p> <p>2. RESPEK receives funding from provincial government</p>
<p><b>Activities:</b></p> <p>1. Design training courses with others</p> <p>2. Identify trainees.</p> <p>3. Prepare course materials</p> <p>4. Undertake training courses.</p> <p>5. Follow up for trainees</p>			<p>Potential trainees have appropriate skills.</p>

# Annex B

## DRAFT PROJECT CONCEPT NOTE

Province	Papua Province
Project Title	Support for Small Contractors

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### Basic information

1.1 The region of Papua is Indonesia's, easternmost, largest and most sparsely populated region. Ever since its integration into Indonesia in 1969, Papua has been troubled by separatist movements and social unrest. Following Indonesia's transition towards democracy and decentralization in the late 1990s, the Special Autonomy Law for Papua was passed in 2001. This was aimed at solving the ongoing conflict and accelerating the economic development of the region.

1.2 In revenue terms, Papua is one of the wealthiest provinces in Indonesia, with substantial income from mining) and from forestry. Yet it also suffers from the highest rates of per capita poverty in Indonesia – with over 80% of the households living below the poverty line. Much of this poverty is concentrated in remote rural areas. Institutions for service delivery at a local level remain chronically under-resourced. A third of Papuan children do not go to school. Nine out of ten villages do not have a health centre, doctor or midwife. Infant mortality is significantly above the national average (56 as opposed to 35 per 1000) and the province suffers from the highest per capita rates of HIV/AIDS in Indonesia.

1.3 There is no single provincial network of roads in Papua province. There are instead a series of isolated clusters of roads around economic centres. Communication between them is by sea or air. Or simply by walking! Most of these clusters are on the coast but one, around Wamena, is in the centre of the province. The road linking Wamena to Jayapura has been nominally under construction for over ten years but has yet to be completed.

1.4 Data on road lengths from various sources is conflicting. Table 1 (appended) shows the lengths of roads in each kabupaten in Papua province taken from the BAPPEDA road inventory. They do not include short lengths of village road built by communities who are then responsible for maintenance. The table confirms the exceptionally low level of road infrastructure in Papua province. Some of the

kabupaten appear to be without any formal road network at all. The situation is worse than it appears at first as the inventory also gives data on the condition of the roads. 54% of earth roads and 39% of gravel roads are shown to be heavily damaged and only a small proportion are in good condition.

1.5 The enormous requirement for roads and other infrastructure that in Papua coupled with high levels of unemployment suggests that unemployment in the rural areas could be reduced by adopting a policy of mainstreaming local resource-based approaches (LRB) in the construction and maintenance of rural roads. This could provide an additional 10-15,000 person work days for each km of new rural road built without significant delay or increase in costs.

1.6 Whilst individuals in government and elsewhere expressed enthusiasm for LRB there is, at present, no high level endorsement for major change. The village infrastructure programme RESPEK is intended to provide village level infrastructure and communities are expected to undertake labour tasks themselves. There is no understanding of the way in which competent small contractors can benefit the community rather than simply take a profit by their involvement

1.7 All significant construction and maintenance work at provincial and kabupaten level in Papua province is carried out by contract and there are large civil engineering contractors working in Papua from elsewhere in Indonesia. Small local firms headed by indigenous people are, however, being given preference for government contracts of up 1 billion Rps (\$110,000).

1.8 The lack of capacity of local contractors is an issue in Papua province. They have also been complaining that there is insufficient work being provided for them. They are said to use labour more than other contractors but there is no coherent approach to, or encouragement of, this.

1.9 It is unrealistic at present to attempt to encourage a shift from machine intensive to labour based construction at all levels in Papua. This could however be a first step towards more general use of LRB in the province. Other provinces have used labour-based approaches to build maintain and repair roads in Indonesia under various programmes. These have largely been successful and country specific LBAT manuals and guidelines are now available. The programmes to date have been relatively small scale although the post-tsunami programmes in Aceh and Nias were substantial.



1.10 GAPENSI – the National Contractors Association of Indonesia – Papua Branch is providing help to small contractors in a number of ways including mentoring, training and technical support. GAPENSI are keen to play a key role in any ILO programme of support for small contractors.

## **2. Significant policy, Design & Implementation issues**

2.1 Government policy is positive in so far as contractors rather than force account is used. Government also ensures that small contracts are let to small indigenous contractors. It will be essential to ensure that government establishes an enabling environment so that such contractors can bid for contracts using labour based approaches.

ILO must make a linkage quickly between the small contractor component of the Aceh Nias programme and the stakeholders in Papua. This should be done by inviting senior personnel from GAPENSI and Papua provincial public works to visit Aceh so that they can see what is happening and get a sense of its relevance for Papua. This will require modest funding for flights etc. They must be accompanied by a senior ILO member of staff who will also have the task of visiting Papua and completing a project proposal that can be submitted to a donor or other for funding.

It is not realistic to quote a cost estimate for the proposed programme until more detailed assessment of the needs have been undertaken.

### **Consultations**

There must be further internal ILO consultations and consultations with the principal stakeholders in Papua province

### **Projected Timetable of Steps to Project Approval**

The expected timetable to approval is as follows:

Design Mission (Inc Aceh visits)	May 2008
PCN approved	Jun 2008

**Roads and Population in Papua Province**

Kabupaten	Population				Roads <sup>29</sup>				
	Area km sq	Population	Pop Density	Job Seekers	State	Province	Kabupaten	Total	Density km/1000sq km
1 Merauke	43,979	155,783	3.54	8,642	605	243	1,330	2,178	50
2 Jayawijaya	12,680	210,654	16.61	2,003	269	62	1,693	2,024	160
3 Jayapura	15,309	91,990	6.01	14,284	-	-	385	385	25
4 Paniani	14,215	112,881	7.94	457	-	-	1,173	1,173	83
5 Puncak Jaya	10,852	111,711	10.29	4,796	-	-	1,439	1,439	133
6 Nabire	16,312	161,519	9.90	5,542	314	40	998	1,352	83
7 Mimika	20,040	126,430	6.31	16,953	-	39	633	672	34
8 Yapon Waropen	3,131	70,744	22.59	2,647	53	161	1,326	1,540	492
9 Biak Numfor	2,360	99,798	42.29	1,925	35	238	738	1,011	428
10 Boven Digoel	28,471	31,443	1.10	-	-	-	403	403	14
11 Mappi	27,632	66,228	2.40	-	-	-	694	694	25
12 Asmat	18,976	62,002	3.27	-	-	-	-	-	-
13 Yahukimo	15,771	137,260	8.70	-	-	-	-	-	-
14 Pegunungan Bintang	16,908	88,529	5.24	-	-	-	-	-	-
15 Tolikara	8,816	44,180	5.01	-	-	-	-	-	-
16 Sarmi	25,902	31,593	1.22	-	-	-	145	145	6
17 Keerom	9,365	37,927	4.05	1,540	-	-	577	577	62
18 Waropen	24,628	21,647	0.88	-	-	-	-	-	-
19 Supiori	775	12,709	16.40	-	-	-	-	-	-
Kota									
71 Kota Jayapura	940	200,360	213.15	21,411	519	618	598	1,735	1,846

## Draft Logical Framework

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p><b>Goal:</b></p> <p>1. MDGs are met in Papua province.</p>		<p>Gol Reports</p>	
<p><b>Purpose:</b></p> <p>1. Small contractors contributing effectively to development and reducing unemployment.</p>	<p>X contractors able to bidding for contracts.</p> <p>Y million labour days for unemployed.</p>	<p>Project evaluations and reports.</p>	<p>Other investments made as needed.</p>
<p><b>Outputs:</b></p> <p>1. Small contractors trained.</p> <p>2. Enabling environment for small contractors.</p>	<p>1. X Small contractors trained.</p> <p>2. Y contracts let in Z</p>	<p>1. Project reports and reviews.</p>	<p>Agreement at all levels of government to support small contractors.</p>
<p><b>Activities:</b></p> <p>1. Design programme.</p> <p>2. Identify trainees.</p> <p>3. Prepare course materials</p> <p>4. Undertake training courses.</p> <p>5. Assess and agree changes to contractual procedures to enable contractors to bid.</p>			

## Annex C

### DRAFT PROJECT CONCEPT NOTE

<b>Province</b>	Maluku
<b>Project Title</b>	Improving Access for Rural Population

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#### Basic information

For several years the ILO has provided policy advice to the Government of Indonesia on local resource-based approaches to rural infrastructure development. To further the process at the local level, a closer collaboration with provincial government is required and the ILO launched studies in 3 provinces of Indonesia. One report reflects study results in the province of Maluku.

An ILO mission visited Maluku 22 November to 1 December 2007, met officials and made field visits to rural infrastructure on the islands of Ambon, Haruku and Seram. The mission was well received by the provincial authorities, who facilitated the visit, exchanged opinions and supplied information. The Secretary of the Government of Maluku Province stated that:

- The Government of Maluku Province supports a future collaboration with the ILO.
- The accessibility is a problem as many areas in Maluku Province were remote with limited access and there is a need to improve access in order to achieve development goals.
- A capacity building programme was crucially important, and the ILO could contribute in these fields through local or centralized training.

A workshop on 30 November concluded the visit and resulted in a consensus for further collaboration.

#### Maluku Province: Problems and Opportunities

The main problem in Maluku Province is isolation; many inland villages do not have road access. This is an obstacle to achieving the overall goal of poverty reduction. The provincial planning authorities explained that there are many villages without access, which are not properly equipped with appropriate basic infrastructure. However, the problem is not documented statistically.

The geography of Maluku is very particular; it is an archipelago consisting of more 100 islands occupying an area of 54,000 square kilometers with a population of around 1.4 million living in 877 towns and villages. With the exception of Ambon Island, where the provincial capital is placed, the population density is low with an average of around 10 inhabitants per square kilometer. The gross domestic regional product per capita for 2004 was Rp 3.25 million, well below the national average of Rp 10.64 million. The percentage of poor people amounted to a little over 33% in 2006. Unemployment is quite high and amounts to around 15% while the underemployment ration is even higher. The total labour force is around half a million and the absolute number of unemployed is thus exceeding 75.000.

The official provincial minimum wage is Rp 28,000 (app US\$ 3) per day for unskilled labour, however going rates in Maluku ranges between Rp 10-20,000.

The total road network totals 4,135 km of roads; for an area of 54,000 sq km it is a very limited network, however it should be noted that roads are to be found on the 22 of islands only. Sea transport does naturally make up for a part of the transport needs.

A little over seventy percent of the National and Provincial Roads are in good or moderate condition but only 31% of the District Roads; this points to serious problems with maintenance. The paved network forms around half of the total network and is in relatively good condition. Earth and gravel roads form the other half of the network and they are generally in a poor condition. Maintenance planning and procedures appear to be lacking behind and a review and a possible revision is needed.

With decentralization, provincial and district roads became the property and responsibility of provincial and district governments. The Public Works Departments have road sections and are responsible for road management at the local levels. The department is well staffed at both provincial and district level and is better equipped than some other departments. At provincial level some funds are available for road works whereas the situation in the districts seems poorer. Staff training is now also a local level activity but with no training road related training facilities in the province. This is costly and limits technical training of staff.

The provincial government is generally well staffed and equipped regarding the key actors: Planning Department, Community and Village Empowerment Agency and Department of Public Works. There are however constraints on the recurrent budget, which limit activity levels. PWD informed that they could only afford to send two staff members for training each year as decentralization had left Maluku without its own training facilities.

The planning system is elaborate and forms the basis for the annual development programmes of the Province. However, plans are generally based on very general objectives set at the government level and specific requests originating from village and district levels. There is thus a need to supplement the planning of rural infrastructure with a rural transport strategy and with accessibility mapping.

The private sector, mainly represented by contractors but also including consulting engineers, is available on the major islands. Most of the contractors are small and relying on hiring-in of equipment but otherwise relying on labour. On the more remote islands with few contractors and a low construction activity level, access to equipment is difficult –or costly as it needs to be shipped in. There is no relevant training of contractors and their staff in the province, except for ad-hoc training organized by the contractors association.

Development of village level infrastructure is basically financed through two major programmes KDP and PPIP; efforts are concentrated within villages and little is done to improve access.

It may be concluded that Maluku has access problems: isolated villages, a limited road network, district roads are in a poor condition and a lack of strategies and methodologies to solve the problems. The Local Resource Based approach developed by the ILO could contribute to solving the problems.

## **Type of Assistance**

Since the administration and planning of the public sector is well organized, it is important that the policy framework for development of rural infrastructure is well in place before other activities takes place. This can be secured by developing a strategy, which describes the problems, sets objectives and guidelines for solving the problems. A strategy will need to include an overview of needs and financing requirements, prioritization instruments will need to be established with regard to selection of individual projects.

A special effort will need to be made with regard to maintenance, especially of district roads. An overview of the existing efforts need to be established and compared with the requirements the present state of the district roads. It is obvious that sustainable financing of routine maintenance will be crucial in order to secure continued access; a study should be undertaken and followed by a maintenance strategy for district roads with procedures, financing and methodologies.

An assessment of the viability of labour-based technologies in road works (foot-paths/bridges, earth and gravel roads) and road maintenance should be undertaken. It should give due attention to prevailing contracting procedures; e.g. bill of quantities, and provide advise on how more labour may be introduced without compromising tender procedures, quality and costs.

Integrated Rural Accessibility Planning (IRAP) has been developed by the ILO as a methodology for mapping access and prioritization of interventions. It is well suited to help solve the problems in Maluku and it should be introduced. Manuals have been prepared for Indonesia; however there seem to be a need for an adaptation to Maluku for integration into the existing planning procedures so that it becomes part and parcel of regular planning efforts. The adaptation should start with basic research/collection of access data in a few selected areas, followed by attempts to prepare plans for integration into the annual, mid-term and long-term plans. This process will need external assistance collaborating closely with local government staff.

Capacity creation, including training of relevant government staff, contractors and KDP staff on the LRB approach should follow after the approval of Strategies for Rural Infrastructure Development and for Road Maintenance.

The ILO support should extend over a 5-year period, where the first 2 years should focus on studies and strategy development and the remaining 3 years would be aimed at capacity creation.

## **Outputs**

The objective of the ILO support would be to secure improved access to the rural population.

Specific outputs will include

- A Strategy for Rural Infrastructure Development, approved by the Provincial authorities.
- A Maintenance Strategy for the province as such,

- Maintenance manual with procedures and a technology handbook for the districts
- A Study of the potential for Labour-based Technologies.
- An adapted IRAP handbook and its integration into regular planning.
- Training Needs Assessments of government staff at all levels, KDP staff and contractor staff.
- Training Material adapted
- Training Courses

### Inputs

The project would be carried out over a five year period in Maluku. The TA team would be led by an experienced Indonesian planner with considerable experience in access planning and training.

In addition there would be need for short term consultancy inputs on policy and strategy study, maintenance, contract management, institutional development, financial systems and training. Most of the short-term inputs would initially be international while actual training will likely be undertaken by nationals.

Long-term staff 5-year	US\$ 200,000
Short term- Studies	US\$ 300,000
Short-term Technology	US\$ 200,000
Short-term IRAP	US\$ 300,000
Training	US\$ 800,000
Logistics	US\$ 200,000
<b>Total</b>	<b>US\$ 2,000,000</b>

# Annex D

## DRAFT PROJECT CONCEPT NOTE

<b>Province</b>	Nation-wide with focus on Belu district (NTT)
<b>Project Title</b>	ILO Poverty Reduction Technical Assistance Programme to improve accessibility, improve governance and create jobs for the rural poor.

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### Background

The Governor of Nusa Tenggara Timor (NTT) Province of the Republic of Indonesia has invited the International Labour Organization (ILO) to further develop its poverty reduction tools and approaches using local resources for infrastructure development and maintenance following on from three earlier trial interventions in three Districts of NTT.

In so doing the Government of NTT, through its principal planning and development coordination body BAPPEDA, has recognized the direct relationship between poor accessibility and poverty in NTT and indeed elsewhere and wishes to address this challenge in a simple and logical manner.

BAPPEDA also recognize that improved local level planning practices will contribute to improved good governance and local decision making and that the use of more labour-enhanced work methods will result in a considerable number of addition jobs during the execution of infrastructure works as well as in their maintenance.

Maintenance is also seen as a currently misunderstood activity and a much under-rated one where apparent short-term cost savings result in huge accumulated additional costs and debts.

The ILO three week mission to NTT in November 2007 has made an initial assessment of the relevance and interest in providing assistance in this area and has made the following findings during the mission:

The poverty levels in NTT (27.9%) are among the highest in Indonesia. Unemployment levels and under-employment levels in NTT are much higher than the national averages

Local level district planning and implementation appears to be reasonably well staffed but has weak recurrent operating resources. Provincial planning is well set up with clear bottom-up planning principles in use but local accessibility planning does not currently adequately cater for prioritizing the link between poverty reduction and improved accessibility either via improved mobility or improved physical access. Technology currently used in infrastructure works involves a mix of Equipment-based (EB) work methods along side Labour-based (LB) work methods. There appears to be great potential for the wider and improved use of a modified EB-LB mix of technologies especially when it is recognized that there is a general shortage of available construction equipment in NTT.

There are 3,600 NTT Contractors which are registered and 90% of these contractors are rated as "small contractors" and they are generally under resourced, have less



than 10 employees and they invariably need to hire equipment in from other contractors whenever they win medium sized contact bids.

The maintenance of infrastructure in NTT is not adequately funded and in the case of roads this is clearly resulting in high vehicle operation costs.

Weak governance issues at District and local level remain a concern to be addressed through the establishment of best practices in the design and delivery of infrastructure programmes

## **Rationale**

The ILO poverty reduction approaches have previously been promoted more as models of best practice in local level planning and the choice of appropriate technology in enhancing employment creation in infrastructure programmes. The reality in countries such as Indonesia, the fourth largest country in the world, is that the challenges of poverty reduction are now the main focus of development assistance and indeed the GOI's own planning and development agendas and programmes.

The presentation of the very special ILO ASIST-AP approaches in the context of the major national poverty reduction programmes and indeed also promoting all infrastructure initiatives as potentially enhanced employment generation/poverty reduction opportunities would more effectively position the efficacy of the ILO approaches where they rightfully belong.

That is; in the very centre of development strategies and programmes where they can demonstrate a direct impact on poverty reduction, improved good governance, improved job creation and improved quality of life for those persons living in the catchment area of ILO influenced infrastructure planning and development programmes which adopt these techniques.

This requires that these ILO approaches are not only able to be proven at the local level with "hands-on" demonstration sites but that in a country like Indonesia which is so very heavily regulated that these ILO approaches are institutionalized at the highest or most appropriate level through reforms and modifications to existing policies and procedures and specific inputs to annual technical and managerial training programmes of key decision maker, consultants and contractors. This may appear to be a major difficulty however one must take heart from the very significant legislative changes that the ILO has already achieved in Indonesia relating to basic labour law.

Based on earlier ILO ASIST -AP experience in Indonesia where there have been some very successful demonstration projects of LB construction and IRAP local level planning, the legacy however has been that neither the planning or technology landscape has fundamentally changed in Indonesia to accommodate these improved approaches, because the policy and processes which influence planning, technology and contractor development have not been changed or reformed.

The twinning of upstream improvements to policies, specification, contract procurement systems and other relevant processes with demonstration sites in the field provides the ideal balance now needed for the long-term sustainability of the ILO approaches.

## **Possible fields of LRB-Technical Cooperation between ILO and GOI**

There is clearly an interest and an demand for the ILO to provide technical support in the area of local level planning especially an approach which recognizes the relationship between poor accessibility and poverty and which empowers local communities to find solutions for improved accessibility through "adding technical value" to the existing local level planning processes as opposed to establishing parallel systems. This means working both at upstream and downstream level in this area if there is to be sustainability.

The whole area of Local Resources Based development has always been of interest in NTT but in the past has been delivered through time-bound projects which have usually not been allocated adequate maintenance funding for their sustainability.

But Local Resources based approaches are not only about the choice of technology they are also about the need to consider life-cycle costs and the adaptation of technical designs to optimize the incorporation of construction materials in the construction of the infrastructure assets. To achieve this major opportunity at greater utilization of local materials requires more flexibility in the technical specifications and contract processes and again this needs ILO technical inputs at both upstream and downstream levels.

The other area where the NTT authorities would appreciate technical support is in the broad domain of contractor development and in the establishment of more effective infrastructure maintenance systems and approaches.

These are clearly imposing challenges which are not necessarily technology specific and there are already some initiatives in these areas being undertaken by both the GOI and development banks. The added value that the ILO can bring to these existing programmes is to incorporate LB components in respective training and development programmes and thereby to add a much needed job creation/poverty reduction value to them.

### **Type and Scope of ILO TA**

The scope of the ILO technical assistance (TA) envisaged is such that it would involve a partnership with either a GOI , major development bank or bilaterally supported infrastructure programme where capital investment costs are already provided for and where the technical management and supervisory staffing arrangements have also already been provided for.

The ILO technical team, based in NTT, would comprise expertise in all of the ILO technical approaches: local level accessibility planning, LB or Modified Equipment-Based (MEB) technology and contractor development. The ILO TA would comprise a small core team and have provision for significant specialist inputs in technical training, policy and contract systems reform, and in alternative designs which incorporate local material resources.

With regards to support in the area of labour-enhanced technology much greater emphasis would be given to a modified approach to current conventional equipment-based (EB) work methods rather than the promotion of a strictly alternative LB approach for which the ILO has already prepared technical manuals and specifications for Indonesia.

A modified EB approach which immediately provides additional jobs on existing projects is considered by the NTT authorities to be far more attractive an option than a strictly LBES approach for which the ILO specifies particular types of small and medium sized equipment in which new investments need to be made by contractors or plant hirers.

In NTT the particularly important opportunities exist for close collaboration if not negotiated partnerships with the GOI through BAPPEDA and Bina Marga, with the AusAID ANTARA and Roads sector projects as well as with the proposed GOI/World Bank Trans Flores Highway project.

An association with BAPPEDA and these major projects would enable the ILO team to be able to then collaborate more effectively with national decision makers regarding policy and infrastructure specification reform.

At the District level the ILO is already an active member of the joint GOI/UN joint programme team working on a multi-front approach to poverty reduction in Belu District. This work has to be a priority for any ILO involvement in infrastructure planning and development in NTT

### **Expected Outputs**

At the end of a four year programme it can be expected that:

- agreement will have been reached with both national and provincial authorities that reforms and modifications to policy areas and technical specification and procurement systems facilitate and even encourage the wider use of labour-enhanced work methods in infrastructure programmes and that
- specific LB technical modules are incorporated into the major recurrent annual technical training programmes of the GOI, World Bank and the Asian Development Bank (ADB), LPJKD and PNPM
- local level planning processes which prioritize improved accessibility for the rural poor are institutionalized by BAPPEDA into the local level planning processes
- Belu District has an effective local level planning system which has benefited from addressing the challenges of improved accessibility planning, has improved infrastructure as a result of more labour-enhanced work methods being used and has an effective system in place for the asset maintenance and that measurable indicators of poverty show significant improvements for the affected population
- More effective maintenance arrangements using labour-enhanced work methods are in place for most of the horizontal infrastructure in NTT province and six target Districts.
- Series of technical monitoring studies comparing conventional EB against LB or MEB work methods in terms of quality of works, jobs created and impact on poverty reduction.

### **Required Inputs**

The project would have an initial phase of four years which would be subject to extension depending on the evaluation of the project after two years.

The preliminary estimated cost of the Technical Team is as follows.

Positions	Work Months	USD
International Team Leader	36	600,000
International Technology specialist/trainer	48	600,000
International Accessibility Planner	12	200,000
International Specialist consultants	48	800,000
National Specialist consultants	96	800,000
Logistics and overheads		700,000
Total		3,700,000