# Perspectives on Rural Infrastructure Development: Workshop findings

## Identifying the Needs and Priorities of Local Governments

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# Planning and Developing Resource-intensive Rural Infrastructure Works
# Identifying the Needs and Priorities of Local Governments

## 1. Background

The ILO, through its ASIST Asia-Pacific Programme, has been working in Indonesia at two different levels to develop a Programme for Resource-intensive Rural Infrastructure Works. Activities started in 1999 to develop, with AusAID funding, a nation-wide programme to mainstream labour-based technology in the country's public investment programmes as a response to the 1997 Asian crisis.

At the national level, the programme has been working with KIMPRASWIL, BAPPENAS, the Ministry of Home Affairs and the Ministry of Economic Affairs. The funding of the nation-wide Programme for Resource-intensive Rural Infrastructure Works did not materialise due to a shift in donor priorities and the recent political and institutional changes in Indonesia. ASIST-AP however worked with KIMPRASWIL to develop the nation-wide Programme for Resource-intensive Rural Infrastructure Works into a rural infrastructure and employment creation/poverty alleviation strategy. The draft strategy was recently presented to the donor community during the GoI/Donors technical consultative meeting. KIMPRASWIL has asked ILO to finalise this strategy. This RBTC project will further contribute to this.

ILO recently conducted a national Level Workshop on Labour-based Technology to explore priorities and strategies for using infrastructure development to create employment and alleviate poverty in Indonesia. The Workshop identified areas for ILO's assistance to assist at the national level in developing strategies and programmes for resource-intensive public works and to assist the national agencies in the transfer of certain responsibilities to the local governments. This was done in the context of the 4 technical fields: local level access planning, labour-based technology, small contracting and local level maintenance systems.

At the local level, ASIST-AP is working with the Gadjah Mada University to develop procedures for local level rural infrastructure planning. Under a demonstration project, activities are being pilot-tested in two districts in Indonesia.

ASIST-AP foresees that its present activities will form the basis for an integrated approach for local resource-based rural works that would be ready for implementation on a larger scale after mid-2002. The consultation meeting will contribute to developing such an approach and the national level strategy to support this.

## 2. Objectives

This paper reflects the summary of findings from RBTC Project RBTC Funds for Poverty Alleviation and Employment Creation[1]. The immediate objectives of the RBTC project would be to introduce the 4 components of rural infrastructure development for employment creation and poverty alleviation at the three local levels (province, district and sub district) in 5 provinces, investigate the general feelings on the importance for local governments to integrate the 4 components into their regular infrastructure programmes, identify bottlenecks related to the 4 technical fields and identify priority areas for technical assistance related to developing the 4 technical fields.

## 3. Approach of the Project

The term of reference requires the team of local consultants to implement the following activities:

a. Prepare a local level awareness programme through the translation into Bahasa Indonesia and printing of the ASIST AP flyer and posters.

b. Visit 5 provinces (South Sumatra, West Java, East Kalimantan, Southeast Sulawesi and Papua) and meet with Government officials at the provincial, district and sub-district levels.

c. Organise a series of meetings and mini-workshops and introduce the 4 technical ASIST-AP fields: local level access planning, labour-based technology, small contracting and rural infrastructure maintenance systems.

d. Prepare a comprehensive overview of rural infrastructure development and maintenance responsibilities at the three levels.

e. Prepare an overview of the different local government budgets (income and expenditures) at the three different levels including external and donor funding.

f. Discuss with local government officials the relevance and opportunities of the 4 technical fields for the planning, development, implementation and maintenance of rural infrastructure under local government's jurisdiction.

g. Identify with the local government officials the actual and potential problems and bottlenecks for applying the 4 technical fields as part of their rural infrastructure planning and development efforts.

h. Identify areas for possible future technical assistance for developing the technical fields at local level and prioritise these areas.

i. Prepare a report setting out the findings under activities b-h for each province.

j. Prepare a comprehensive synthesis report reviewing the 5 provincial reports with recommendations for future action.

[1] RBTC Funds for Poverty Alleviation and Employment Creation. Planning and Developing Resource-intensive Rural Infrastructure Works: Identifying the Needs and Priorities of Local Governments (Project Code. A.270.08.326.098). The project was carried out by Dr. Danang Parikesit, Lead ILO Consultant.

k. Present this report to the relevant central agencies and counterparts at the national level during a mini-workshop.

4. Outputs

The following outputs are produced under this RBTC project:

a. A series of mini-workshops at provincial, kabupaten and kecamatan level in the 5 selected provinces to discuss the different responsibilities at the three local government levels for planning, developing, implementing and maintaining rural infrastructure; review the annual local government income and expenditures; introduce the 4 technical fields and identify opportunities and relevance of the 4 technical fields in the context of decentralised rural infrastructure development, identify problems and bottlenecks in using/developing the 4 technical fields and identify priorities for technical assistance.

b. 5 provincial reports setting out the findings of the provincial visits in accordance with activities b - h. The provincial reports should have an identical format and should be written in English and Bahasa Indonesia. The reports should be complemented by a PowerPoint presentation in both languages.

c. A synthesis report summarising and analysing the provincial reports. This report should provide suggestions for future action, based on the analysis, for ASIST-AP to further develop the 4 technical fields in Indonesia. The report should be produced in both languages: English and Bahasa Indonesia. The report will be structured as follows:

    i. Description of Rural Infrastructure Programmes Responsibility at each level (Province, Kabupaten and Kecamatan)

    ii. Yearly local Government budget, before and after Law 22/1999 and 25/1999; revenue (categorised also by source of revenue including donor/lending agency, Community Development fund) and expenditure sides. Identification of infrastructure program financed by non-budgetary funds should also be identified

    iii. Relevance and importance of ILO ASIST AP 4 components for their infrastructure programs and priority

    iv. Problems and bottlenecks for applying these 4 component

    v. Priorities for TA for developing the 4 components

d. A mini-workshop in Jakarta to present the findings to the main national agencies involved and to discuss follow-up activities and priorities.

e. Translated ILO ASIST flyer and posters.

## 5. Overall Conditions of Local Infrastructure Development Programmes

Indonesia has been amongst the hardest hit in the current Asian economic crisis. Based on World Bank and IMF estimates[2], the short-term economic prospects are not encouraging. The Gross Domestic Product (GDP) was estimated to have declined by 15.6% in the 1998/99 financial year. The construction sector suffered the most (a 40% decline), financial services declined by 27% and the trade, hotel and restaurant sector declined by 21%. Only the agriculture and mining sectors have not been severely affected, although non-oil export earnings fell by 8.8%, notwithstanding severe depreciation of the Rupiah.

The social effect of the financial crisis on Indonesia has been serious and World Bank estimates suggest that the impact has resulted in an increase in "absolute" levels of poverty from 10% in 1997 to 14-20% in 1998. The Social Monitoring and Early Response Unit (SMERU) estimates the decline in absolute poverty to have increased from 11% to 13.8% by 1999 (other estimates, including ILO, have produced figures of up to 48%).

With a contracting economy, labour demand has declined - with highly visible lay-off in the construction and manufacturing sectors. In 1998, Bappenas estimated that around 6 million persons (+/-7 % of total labour force) were laid-off, the greater part of which (1 million) came from the construction sector (25% of the construction labour force was laid-off). Conflicting estimates by SUSENAS for 1997 indicated a 9% decline in the construction sector, combined with declines of 13% in industry and 27% in the electricity sector.[3] These impacts were absorbed into the agricultural sector - some 4.5 million have been re-absorbed into agriculture, equivalent to a 15% growth in the agricultural workforce.

Decentralisation process toward district and provincial autonomy is underway and has been the effect of the Law No. 22/1999 and 25/1999. This process has changed the landscape of governance and more importantly the role of central and local governments in allocating their development budget and earning their revenues. Local governments have now more right to allocate the budget according to own development needs but at the same time having more responsibility to local stakeholders. Therefore accountability and transparency of development programmes are necessary to guarantee the social and economic sustainability of the region. With more than 300 districts and cities as well as the establishment of new provinces, this process is an extremely difficult task for both local and central governments. Decentralisation requires a slow process of transformation from blue print approach to a specific approach reflecting local development needs and from central budget allocation to decentralised fiscal mechanism. Local capacity to manage such changes are the therefore an absolute necessity.

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[2] IMF (1999). World Economic Outlook. IMF, Washington.
World Bank (1998). World Development Report. World Bank, Washington.

[3] Conflicts in estimates in part derive from "conventional" definitions of unemployment, which exclude those not "seeking work". Estimates by Iftikhar Ahmed and Shafiq Dhanani ("Indonesia's Recovery: Employment Optimism or Statistical Illusion?", Occasional Discussion Paper Series No.2, ILO, Jakarta, October 1999) put the "true" levels of unemployment (at 12.1 and 14.5 million for 1997 and 1998) at over three times the statistical measure

Apart from local government's own revenue, in the decentralised system, central government requires to allocate local government grants through two mechanism, namely general budget allocation (DAU: dana alokasi umum) and specific budget allocation (DAK: dana alokasi khusus). In the past, budget allocation from central government was channelled through central government contribution using presidential instruction for use in a specific purpose, i.e. district roads. Pre-decentralisation trend of local government revenue can be seen in the below figure.

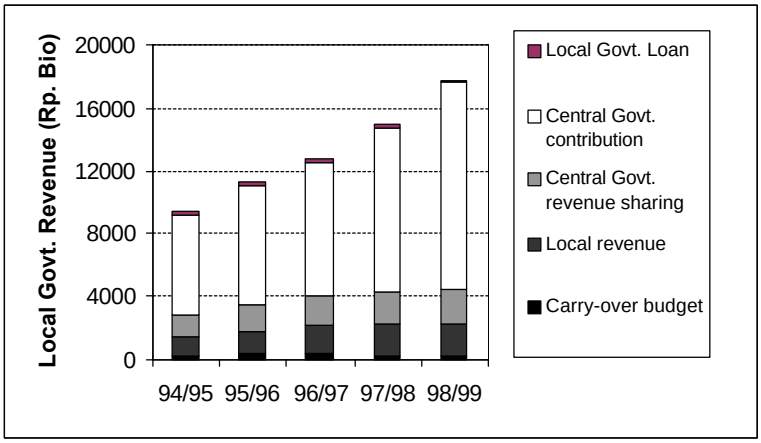


Figure 1. Previous Local Government Revenue
(source: Profile of Local Government Finance, National Development Planing Agency, 1999)

The above trend shows that despite the increasing local government revenue, the major source of revenue was still the central government contribution. The absolute level of local revenue remains at the more or less constant level and this means that the proportion of local revenue is decreasing. Post decentralisation figure is still unknown but this trend is expected to continue[4], at least for a short period until local governments are able to develop its own local economic resource and development and an improved fiscal decentralisation takes place. In a decentralised system, local governments are allowed to request for direct development financing through foreign, domestic (including inter region) loans. However, such financing scheme is not expected to take place until the end of 2002 fiscal year – unless through central government[5]. In the short period, central government is still playing a vital role in local development programme.

[4] The central government's general budget allocation for each district/province is indeed varied quite substantially, not only the amount but also its proportion to local government budget. West Java province in 2001 for instance, 30% of its local government budget came from general budget allocation, whereas in East Kalimantan, the figure will be more than 80%.

[5] KOMPAS DAILY, Saturday 15 December 2001, Page 13. Statement of the Ministry of Finance in accordance with the 4th Letter of Intent to the IMF. Local government loans showed in Figure 1 were loans channelled through central government for example Urban Development Project (P3KT), loans for province-owned, or district-owned companies, and other forms of loans. These may come from foreign loans or domestic loan, i.e local government account (RPD: rekening pembangunan daerah)

How did local governments spend their budget? Did they spend it wisely? What will be the situation after decentralisation? These questions are posed for various reasons. Decentralisation is a new system for Indonesia, and local capacity is an important element in the success of the process. Local development needs has to be identified and clearly addressed by local governments so that programmes and projects can stimulate local economic development – which in turn increase local revenues through taxes and duties. Another reason is the fact that central government allocation is still playing an important role and therefore fiscal decentralisation mechanism needs to be carefully monitored and continuously improved. Focus on rural development is also another reason why it is interesting to see how local governments react to decentralisation process. Current Bappenas studies[6] and studies elsewhere have demonstrated that rural economy is a vital element in sustaining economic development of the region and nation-wide. Rural economy was proven robust against economic crisis and is expected to do so in the future. How would local governments allocate their budget to promote and to facilitate rural economic development is of the interest of central government and development economists.

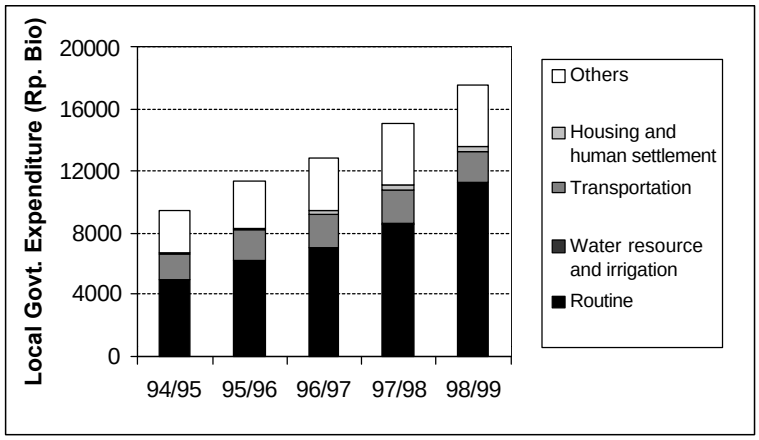


Figure 2. Previous Local Government Expenditure
(source: Profile of Local Government Finance, National Development Planing Agency, 1999)

In a recent seminar[7], it was raised an issue of rivalry between development budget and routine budget. Routine budget reflects the funds required to perform government management role[8] and development budget is a budget allocated for programme implementation through projects. Figure 2 demonstrates the previous allocation is expected to be the short-term future trend, especially with regard to infrastructure sector.

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6 See results of PARUL (Poverty Alleviation through Rural and Urban Linkages), PEL and other studies to review P3DT programme.

7 See seminar proceeding and discussion results of Strategi Pemenuhan Kebutuhan dan Penentuan Prioritas Pengembangan Infrastruktur Wilayah, Hotel Bumi Karsa, Bidakara Jakarta, 26 November 2001

8 In the infrastructure sector, term "routine budget" is associated with "routine maintenance". In government account however, routine budget is used for government management, overhead, depreciation of government assets, travel expenditure and expenses for the major/local parliament.

One would expect that if local governments responded to local development needs, local development budget will be allocated in larger portion to development budget and not the other way around. However, the above figure shows that despite an increasing local government expenditure. Most of funds went to routine budget[9]. Infrastructure budget (mainly for water resource, irrigation, transportation, housing and human settlement) was no exception – it had a decreasing percentage of local budget. In the year 2001 Southeast Sulawesi for example, 80% of provincial budget was used for routine budget, leaving 20% for development budget (5% was used for transportation sector).

The above figure does not reveal all budget for water resource and irrigation projects since a large portion of them were borne by central government budget. The dependency of local governments to the central government budget has also supported with the fact that the central government has a major programme of rural infrastructure development through World Bank-supported P3DT[10] programme or recently JBIC-supported P2D[11] programme. In addition, rural infrastructure was supported by fuel subsidy reallocation programme. While long-term sustainability of such programmes is to be promoted, it seems that the programmes have created a certain dependency of rural infrastructure programme to the central government. An incentive to develop a sustainable rural infrastructure development has not been taken effect and this will be the biggest challenge of a similar future programme.

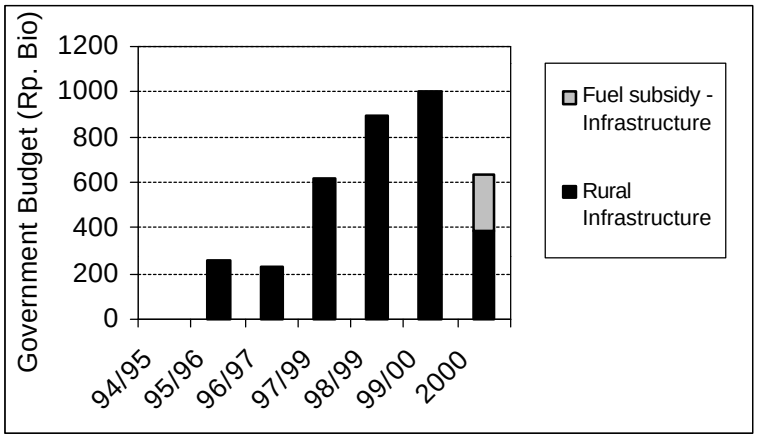


Figure 3. Central Budget Allocation for Rural Infrastructure Development Projects (source: Profile of Local Government Finance, National Development Planning Agency, 1999)

P3DT Project started in 19955/1996 which was meant to support poverty alleviation programme through a construction or rehabilitation of infrastructure in poor area in order to expand employment opportunity. In 1995/1996 and 1996/1997 the number of villages received the support were 2,050 villages and 2,627 respectively. In 1997/1998 it increased to 4,986 villages and then 6,122 villages and 5,692 villages in the next two

[9] Budget for loan repayment is included in both routine (1%) and development budget (marginal).

[10] P3DT: Program Pembangunan Prasarana Desa Tertinggal or Least Developed Village Infrastructure Development Programme

[11] P2D: Program Pengembangan Desa or Rural Development Programme

years. In the year 2000 the programme was developed at sub-district level with 250 sub districts/kecamatan as the programme recipients[12].

Review of P3DT programme shows that the strength of the program lies on its transparency, accountability, and fiscal decentralisation process, empowerment and learning capacity of local organizations, the use of local materials, regional approach , the presence of multiplier effect, the provision of basic infrastructure and the formation of capital[13]. However, it was also identified some of the problems such as its nature of blue print approach and low monitoring and management, lack of monitoring for the consultant, sustainability of community consulting, and the lack of community contribution for community work.

Another important issue is the need of integration and project selection, appropriate design and the need of supervision during construction, sustainability in operation and maintenance, mitigation of social problems, support to activities which improve positive impacts and recognise its influencing factors[14].

How effective such central government support to encourage local governments to develop future rural infrastructure programme is still unknown, but there is always a worry that local governments are not having enough incentive to consider rural infrastructure as their responsibility.

## 6. Summary of Provincial Workshops

### a. Brief condition of provinces

The term of reference requires that the consultants undertake workshops in 5 provinces at three levels of governments (province, district/kabupaten, and sub-district/kecamatan). The provinces and its conditions are as follows:

Table 1. Basic data on provinces, 1999

| No | Province | No. of Districts | No. of Sub-Districts | No of Village | Area (km2) | Population (000 pers) | Household (HH) |
|---|---|---|---|---|---|---|---|
| 1 | Papua | 13 | 173 | 3,255 | 394,800 | 2,220 | 7,513 |
| 2 | Southeast Sulawesi | 5 | 67 | 1,270 | 38,140 | 1,781 | 2,728 |
| 3 | East Kalimantan | 7 | 87 | 1,090 | 211,440 | 2,689 | N/A. |
| 4 | West Java | 26 | 543 | 6,682 | 43,177 | 43,089 | 45,620 |
| 5 | South Sumatra | 10 | 110 | 2,583 | 112,471 | 7,859 | N/A. |

Source: Basic Development Data, National Development Planning Agency, 1999

[12] Bappenas, 2001, Data on Poverty Alleviation Programme 1994-2000

[13] Yayasan Desa Mandiri, 2000, Independent Monitoring of Village Infrastructure Project: Pola Swaskelola (Loan IBRD 4100-IND), Final report, hal. 236-241.

[14] PCI, 1999, Benefit Evaluation Study for the First Rural Areas Infrastructure Development Project (OECF IP-437), Final report and Interim report 5 (Post Implementation Period: FY 1996/1997), hal 51-53

Table 2. Social and Economic condition of the provinces[15], 1999

| No | Province | GDRP per capita (000 Rp/year-pers) | Population Density (Pers/km2) | % of poor people | Local revenue (Mio Rp.) | Local government budget (Mio Rp.) |
|---|---|---|---|---|---|---|
| 1 | Papua | 65.085 | 5.62 | 16.76% | 16.295 | 646.323 |
| 2 | Southeast Sulawesi | 8.094 | 46.70 | 10.78% | 17.205 | 226.917 |
| 3 | East Kalimantan | 54.631 | 12.72 | 13.50% | 40.075 | 574.365 |
| 4 | West Java | 70.547 | 997.96 | 10.55% | 519.214 | 2,860.624 |
| 5 | South Sumatra | 25.622 | 69.88 | 18.72% | 62.933 | 723.610 |

Source: Basic Development Data, National Development Planning Agency, 1999

The above tables show that the provinces visited by the consultant's team consist of various types of region. Papua and East Kalimantan have a vast area of coverage whereas West Java has relatively developed its economic condition but with much higher population density. Despite the large area, Papua, East Kalimantan and Southeast Sulawesi have a small number of districts, sub-districts and villages compare to West Java. South Sumatra is more or less lies between the two extremes. The case studies have provided a valuable knowledge on the current situation in Indonesian rural infrastructure development. It is expected that such variation will provide a better understanding of the regional, economic and social disparities of Indonesia.

b. Strategic issues of rural infrastructure development

1) Geographical, Social and Economic Disparities

Indonesia is a land of enormous geographical, social and economic disparities. The vast country of more than 120 million living in around 17,000 islands with large difference in natural endowment, wealth and human capital has resulted a difficulties in managing infrastructure development. The term "need of local community" varies significantly from one place to another. Even the national agenda of poverty alleviation or eradication should have different approach from one region to another due to the level of poverty and ways to address the issue.

Figure 4 shows in Indonesia, poverty level[16] varies from less than 5% service-based province of Bali to more than 25% natural resources-based province of West Kalimantan.

[15] The above table is data of 1999, data of 2000 show a significant difference for regions with rich natural endowment from forests, oil and gas production like East Kalimantan and Papua. In some cases, those region now has doubled or even more local government budget.

[16] It is widely accepted that the definition of poverty may different between one organization to another.

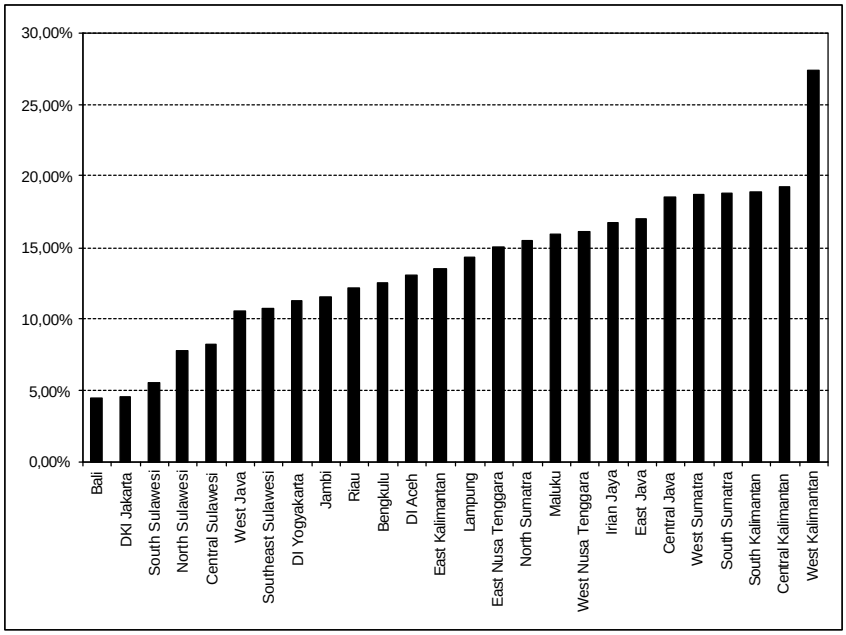


Figure 4. Percentage of Poor People to the total number of population in the province (source: Basic Development Data, National Development Planning Agency, 1999)

Another figure below depicts the relation between proxy income per capita (showed by the GDRP per capita) against the percentage of poor people in the province. The results show that there is no significant relation between the regional wealth and the poverty level. Although this has mainly attributed to the economic structure of the region, the fact that rich region is not always associated with the low poverty level has made it difficult to address the issue of poverty alleviation.

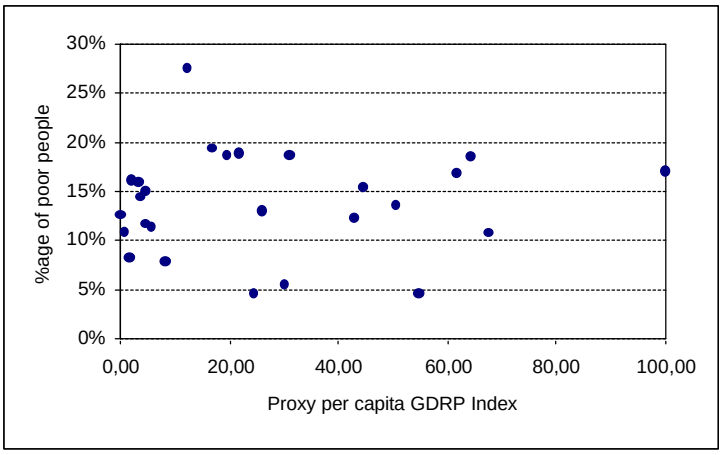


Figure 5. Relation between proxy income per capita and percentage of poor people in the region
(source: Basic Development Data, National Development Planning Agency, 1999)

With a decentralisation process underway, such disparities are even more difficult to address because each of more than 300 districts has its own characteristics. In many cases, we can find that even in a province, there are districts with large differences.

2) Rural development and indigenous people

Indigenous people has not been an development issue ten years ago but now it is gaining more acknowledgement. Previous ILO mission report on West Papua/Irian Jaya has also identified that it is essential to recognise the right of indigenous people in the development process. The individual and collective proprietary right (Hakko Aleut) to land and natural resources within their traditional territories based on the customary laws. Therefore they consider it but proper, just, and fair that proprietary rights to these traditional areas are respected by both the government and private sector[17]. While the ILO mission has specifically address the issue of indigenous Papuan, the issue is not unique to Papua or Iran Jay but also applies to other regions throughout Indonesia. Such spirit has also been the intention of ILO Convention No. 169[18]. In the context of rural development, the recognition of such traditional right should be integrated into the planning, implementation and evaluation cycle. Most of problems are related with – but not limited to, land acquisition and right to access natural resources within the traditionally-owned property. Only by incorporating their right, rural development will respond and benefit the local community. Previous approach of rural infrastructure development has not address such issue in a proper way, and thus has created problems during and after construction period.

Many local cultures , wisdom and technologies need to be examined and assessed. Most of them have positive contribution to the identification and implementation of development needs of the region, but some of them should be treated carefully. In areas where land cultivation is a culture, the concept of participation for public facilities and asset ownership of community facilities are relatively easy to understand. However, for communities where the traditional ways of life is through collecting forest products or in fishermen's village, such concept is sometimes difficult to accept. Therefore, anthropological and sociological approaches are required in addition to technical knowledge.

[17] Nahayangan, Domingi I., ILO-INDISCO Exploratory Mission Report on The Development Concern of Indegenous People in Irian Jaya (West Papua), Indonesia, October 2001. More recent development in Papua has lead to the issuance of the Law on a Special Autonomy for Papua Province which recognises the right of the people of Papua to access a larger portion of natural resources taxes and duties as well as profit sharing schemes and to address and to manage its own development needs in a more autonomous manner. An important element of the Law is also the decision to put a larger right and bigger responsibility at the provincial level (as opposed to the Law 22/1999 which put rights and responsibilities more at the district level).

[18] ILO Convention 169 on Indigenous and Tribal People

3) Decentralisation, fiscal policy and local governance in rural infrastructure development

Decentralisation has been the jargon of Indonesian development programme since the issuance of Law No. 22/1999 on the regional autonomy and Law No. 25/1999 on the fiscal decentralisation and profit sharing scheme of natural resources revenue. Fiscal decentralisation means more rights and responsibilities for local governments to the development budget. Although major source of funds are coming from central government through general budget allocation and special budget allocation, the utilization of such budget will depend upon solely by the decisions made by local government agencies and local parliaments. This means that there should be enough capacity to manage – to plan, disburse and evaluate, the use of public money in order to provide transparent and accountable development programmes. Local governance is becoming more important with various stakeholders brought in the system such as local NGOs, community groups, universities as well as local businesses. The currently issued Law on Consumer's right and Law on Construction Services have supported the transparency and accountability of government spending on infrastructure development programme.

In the reality however, such governance is still have to find ways to operate. Empowerment of local parliaments need to address with cautious. They need to be assisted with adequate data and technical knowledge in order to provide a sound and reliable recommendation. Local NGO, community groups and local universities need to acquire technical knowledge on infrastructure aspects whereas local construction industry needs to provide a better business practice based on performance and merit system.

Such effort should be continuously pursued if local governance in rural infrastructure development is expected to achieve its development objectives.

b. Bottlenecks in rural infrastructure development

Most local governments beliefs that rural infrastructure plays an important role in supporting regional social and economic development. However, there are several problems associated with developing sustainable rural infrastructure. Some are related with geographical and labour condition but many of the problems are affiliated with local government capacity to manage rural infrastructure on their own. Workshops conducted in five province at three government levels (province, district and sub-district) have resulted in the following summary of bottlenecks:

Table 3. Summary of bottlenecks in rural infrastructure development

| Bottlenecks | Description | Papua | Southeast Sulawesi | East Kalimantan | West Java | South Sumatra |
|---|---|---|---|---|---|---|
| Geographical condition | Geographical difficulties | | ð | ð | | ð |
| Labour condition | Limited skills of labourer and low productivity | ð | ð | ð | ð | ð |
| | Uneven labour availability | | ð | ð | | |
| | Low wage level and or high living costs | ð | ð | ð | | |
| Government's management capacity | Lack of Institutional/ educational support | ð | | | ð | |
| | Difficulties to integrate infrastructure plan – programme mismatch and lack of planning instrument | ð | ð | ð | ð | ð |
| | Lack of government capacity to manage rural infrastructure development | ð | ð | ð | | |
| | Lack of reliable infrastructure data | | | ð | | |
| | Lack of awareness and low attitude toward the importance of rural infrastructure | ð | | | ð | ð |
| | Lack of political commitment and conducive local government policies | | | ð | | ð |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Managing construction industry – Too many general contractors and lack of specialized contractors | ð | ð | ð | | ð |
| | Packaging of projects – large package is preferred | | ð | | | ð |
| | Low quality of infrastructure work | | ð | ð | | |
| | Lack of business opportunity and information disclosure to participate | ð | | ð | | |
| Government finance | Limited government budget for rural infrastructure | | | | ð | ð |
| | Budget available for maintenance | ð | | ð | ð | ð |
| | Dependency to central government budget | | | | ð | |
| | Availability of local materials/technology and high costs of construction | ð | ð | ð | | |
| Private sector and construction industry structure | Limited private sector working and investment capital | ð | ð | ð | | ð |
| | Lack of competent Trainers | | | | | ð |
| | Managing construction industry – Too many general contractors and lack of specialized contractors | ð | ð | ð | | ð |
| | Private sector management and technical skills | ð | | ð | ð | ð |
| | Availability of a proper sub-contracting scheme | | ð | | | |
| | Low quality and lack of experience of small scale contractors | ð | ð | ð | | ð |
| | Low quality of infrastructure work | | ð | ð | | |
| | Lack of business opportunity and information disclosure to participate | ð | | ð | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Packaging of projects – large package is preferred | | ð | | | ð |
| | Availability of local materials/technology and high costs of construction | ð | ð | ð | | |
| Community involvement | Difficulties to local community to maintain rural infrastructure – too complicated and coverage is to wide | | ð | ð | | |
| | Ownership of rural infrastructure asset – related to local culture | ð | ð | ð | ð | ð |

The above table – obtained using meta-planning techniques, obviously raised some questions. For example, why geographical difficulty is not seemed to be a problem in Papua – a land of extreme geographical condition? Why only East Kalimantan region appears to have problem with a reliable infrastructure data? Or is it the sole case for West Java and not for the others – the dependency to central government budget? Are there enough competent trainers elsewhere but South Sumatra? While it is still unclear why some problems appear in one province but not in the others[19], it is obvious that in most of areas and levels, there are some similarities and common problems.

The list below shows the common obstacles experienced in the rural infrastructure development which are also a prevalent problems and may be found elsewhere in Indonesia:

a. Lack of skilled and thus productive workers
b. Difficulties in integrating rural infrastructure programmes due to lack of planning, implementation and monitoring instruments
c. Difficulties in managing large numbers of contractors which attributed to a loose system of entry into construction business
d. Budget availability for maintenance
e. Lack of access to working and investment funds for private sector
f. Low managerial and technical skills for local firms
g. Lack of ownership for community facilities and low participation for public infrastructure

[19] In meta planning exercise, it is understood that the comparability between results is dependent upon the ability to control the response from each group in a given limited available time. It is sometimes difficult to control such situation. Unless the workshop facilitators are provided with a close set of response, than the above table can be easily compared.

While the above list provide common obstacles and bottlenecks, the table also demonstrates that some areas like Papua and East Kalimantan are having difficulties in allocating their maintenance budget. In the contrary, only West Java has raised an issue of dependency toward central government budget. Southeast Sulawesi surprisingly enough, have focused its problems in other aspects but in financing aspect of rural infrastructure development. It is important to note however that Southeast Sulawesi is known to be one of the poorest region in Indonesia. In Papua, there is a need to have access to appropriate tools and technology. Previous ILO Program of vocational training center on infrastructure has been under-utilised and as the result the existing training facility has been neglected or obsolete.

c. Priority actions

Priority actions are very much related with the ways to remove obstacles and reduce problems. Some of them fall within the domain of infrastructure development programme but some others are beyond the capacity of local stakeholders to overcome them.

Table 4. Priority Actions

| Bottlenecks | Description | Priority Actions |
|---|---|---|
| Geographical condition | Geographical difficulties | Provide improved access through infrastructure and services |
| Labour condition | Limited kills of labourer and low productivity | Skills training and productivity training – including the use of appropriate tools and technology |
| | Uneven labour availability | Provide incentive for labour and provide EB and LB project[20] differentiation |
| | Low wage level and or high living costs | Improved wage standard – require central government's approval |
| Government's management capacity | Lack of Institutional/ educational support | Improve co-ordination among government institutions through co-ordination framework and strengthen educational/training facility |
| | Difficulties to integrate infrastructure plan – programme mismatch and lack of planning instrument | Equip local government with planning instruments, guidelines and manuals |
| | Lack of government capacity to manage rural infrastructure development | Improve local government (staff) capacity through training and education |

[20] *Labour-based technology* describes technology in which labour, supported by light or medium-sized equipment, is used as a cost effective method of providing or maintaining infrastructure to a specified standard. *Equipment-based technology* is the opposite of "labour-based" in that most work is done by labour-replacing equipment, supported by a small labour force – generally effective where labour is not readily available or labour costs exceed US$ 5 per day (source: Advisory Support and Training for Wider and Improved Labour-based Technology (LBT) in Infrastructure Programmes in Indonesia (INS/98/M02/AusAID) - PHASE III Project Document, pp vi)

| | | |
|---|---|---|
| | Lack of reliable infrastructure data | Provide assistance for the development of rural infrastructure database system |
| | Awareness and attitude toward the importance of rural infrastructure | Awareness raising and improve profile and importance of rural infrastructure |
| | Lack of political commitment and conducive local government policies | Awareness raising and improve profile and importance of rural infrastructure |
| | Managing construction industry – Too many general contractors and lack of specialized contractors | Reform in local construction industry and provide assistance for certification – require central government's regulations and provincial government's approval |
| | Packaging of projects – large package is preferred | Reform in contracting procedure – require central government intervention in tendering |
| | Low quality of infrastructure work | Improved supervision and maintenance system |
| | Lack of business opportunity and information disclosure to participate | Improved access to information and participation for NGOs, community groups, local education/training institutions, and business society to infrastructure development plans/programmes |
| Government finance | Limited government budget for rural infrastructure | Improve budget allocation procedure – equip with budget allocation tools for prioritization |
| | Budget available for maintenance | Improve budget allocation procedure – equip with budget allocation tools |
| | Dependency to central government budget | Improve budget allocation procedure – equip with budget allocation tools |
| | Availability of local materials/technology and high costs of construction | Government subsidies and/or incentives for locally produced materials and local construction technology |
| Private sector and construction industry structure | Limited private sector working and investment capital | Provide access to capital – related with regulations in the banking sector in relation with construction industry |
| | Lack of competent Trainers | Provide ToT scheme and provide opportunity for local training consultant |
| | Managing construction industry – Too many general contractors and lack of specialized contractors | Reform in local construction industry and provide assistance for certification – require central government's regulations and provincial government's approval |
| | Private sector management and technical skills | Technical and management training for private sectors in the construction industry |
| | Availability of a proper sub-contracting scheme | Reform in contracting procedure – require central government intervention in tendering |

| | | |
|---|---|---|
| | Low quality and lack of experience of small scale contractors | Technical and management training for small scale contractors |
| | Low quality of infrastructure work | Improved supervision and maintenance system |
| | Lack of business opportunity and information disclosure to participate | Improved access to information and participation for NGOs, community groups, local education/training institutions, and business society to infrastructure development plans/programmes |
| | Packaging of projects – large package is preferred | Reform in contracting procedure – require central government intervention in tendering |
| | Availability of local materials/technology and high costs of construction | Government subsidies and/or incentives for locally produced materials and local construction technology |
| Community involvement | Difficulties to local community to maintain rural infrastructure – too complicated and coverage is to wide | Classification and differentiation between community and public works, and depending on the priority |
| | Ownership of rural infrastructure asset – related to local culture | Improve local participation in the development cycle of rural infrastructure |

## 7. Recommendations for Follow Up Activities

### a. The need to establish a future direction of Rural Infrastructure Development Programme

Rural infrastructure development programme is gaining a recognition of importance just in a recent years. In previous years such programme has not been the mainstream policy of the government both at central and local levels. Even today, not every agency related with infrastructure or rural development considers rural infrastructure as the main focus of their programme. That is the reason why it is not easy to predict the future direction of rural infrastructure development programme. So far local governments rely heavily to central government to develop rural infrastructure programme – which ideally should not be the case in the future. P3DT and P2D programmes for instance, need to find ways to incorporate the concept of rural infrastructure programme and to mainstream it into regular local government programmes and projects.

Future rural infrastructure program should integrated with rural development programme in the one hand and on the other hand must be incorporated with sustainable infrastructure development programme. Current rural development programme focuses on rural industrialisation, and an empowerment of rural community toward transparent and accountable local governance. At the moment, infrastructure development programme regards maintenance, rationalization of infrastructure and privatization as its main strategies. Future direction of rural infrastructure programme should be developed along this line. In fact this would be and should be the first

activities to be undertaken prior developing more detailed programme of sustainable rural infrastructure development. Sustainable rural infrastructure development agenda should be able to position itself in larger post-crisis and long term social as well as economic development context.

b. Framework to share responsibility of various stakeholders in rural infrastructure development

Rural infrastructure development is a responsibility of various stakeholders, not only at local levels but also at central governments. With the decentralisation process underway, this undertaking should be managed carefully and prudently to achieve its objective. Central government agencies, including Ministry of Human Settlement and Regional Infrastructure (Men KIMPRASWIL), National Development Planning Agency (BAPPENAS) and Ministry of Home Affairs and Regional Autonomy (Mendagri dan Otoda) under the co-ordination of The Coordinating Ministry of Economic Affairs (Menko Perekonomian) have the prime responsibility to transfer not only rights and responsibilities, but also the capacity to manage infrastructure development including its technology and knowledge. State Ministry of the Acceleration for the Development of Eastern Indonesia plays a vital role in developing programmes for eastern Indonesia – where rural infrastructure is seen as a prime mover in speeding up and providing a robust foundation for the development of the least developed region in Indonesia.

At the local level, both provincial and district governments should share its right and responsibilities. Improved capacity in managing rural infrastructure development programme seems to be the main objective of provincial and district governments while sub district governments has its objective to be the district arm for integrating needs of village and the community for infrastructure. The capacity should also include the financing capacity and budget allocation for rural infrastructure, especially for maintenance. Local government agencies include Local Development Planning Agency (BAPPEDA or BP3D in Irian Jaya), Regional Infrastructure offices and alike (Dinas Kimpraswil or PU), Manpower office (Disnaker), and Local/Community Empowerment Agency (PMD). Local NGOs and community groups will have a shared responsibility to ensure that rural infrastructure programmes are implemented transparently and are hold financially and technically accountable. Local training/education institution should incorporate and disseminate the knowledge of rural infrastructure development. Lastly local construction industry and construction firms must ensure its capacity to implement infrastructure projects with appropriate technology to ensure that the acceptable quality and costs is obtained without sacrificing accountable business practice.

c. Potential role of ILO ASIST Asia Pacific

The previous sections in the report has provided a sound argument for technical assistance for rural infrastructure development in Indonesia. Management and technical capacity for both governments (central and local) and private sector have been the main output of the workshops and visits to 5 provinces and discussions with various government agencies. The ILO ASIST Asia Pacific needs to respond to such demand for services. Four pillars of ILO ASIST Asia Pacific has been appropriately address the needs for especially for local governments.

Two of the immediate promising roles of ILO ASIST AP at the provincial and district levels being the local level planning (with regard to local/rural infrastructure planning) and rural infrastructure maintenance strategy while labour-based technology and small-scale contracting are very much related with central government willingness and policies to undertake changes in infrastructure procurement procedure. Improving local level planning will certainly help local governments to address the issue of mainstreaming participatory approach while at the same time providing technical foundation of prioritization and budget allocation procedure. Rural infrastructure maintenance strategy will equip local governments, particularly at more developed regions of Indonesia to focus on sustainability and continuously improve their social and economic development. Provision of planning techniques and modules, training and capacity building programmes as well as demonstration projects are some of the instruments that were requested by local governments during the workshops. Some regions requested the support for appropriate tools for labour based works. The difficulty yet to overcome is the link between ILO ASIST AP and local governments. The ILO is a UN organization which has an link with the central government. The ILO ASIST AP will have to find a most suitable and proper ways to provide its services to local governments.

At the national level, it is important that ILO ASIST AP also work together with the relevant central government agencies in developing a national strategy in the infrastructure development in order that future infrastructure investment is spent to optimally support short term and long term objectives of social and economic development.