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**Integrated Rural Accessibility Planning and
Community Participation in Rural Infrastructure Development**

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***Integrated Rural Accessibility Planning
and
Community Participation
in
Rural Infrastructure Development***

By

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List of Abbreviations

AIC	Appreciation, Influence, Control
ESCAP	Economic and Social Commission for Asia and the Pacific
ILO	International Labour Organisation
IRAP	Integrated Rural Accessibility Planning
Lao PDR	Lao People's Democratic Republic
MCTPC	Ministry of Communication, Transport, Post and Construction
PPRID	Participatory Project on Rural Infrastructure Development
RDC	Rural Development Committee
UNDP	United Nations Development Programme
Lao PDR	Lao People's Democratic Republic

Foreword

Lack of access is a fundamental cause of poverty. If people have no adequate access to basic services such as water supply, health, education and markets they will be unable to satisfactorily meet their basic needs. Improving access to services means better access to health care and education, improved access to potable sources of water and improved transport linkages to markets and district centers. Improving access is often a key factor in rural development and poverty alleviation initiatives.

The Integrated Rural Accessibility Planning (IRAP) project is a project that improves local level procedures to plan for improved rural access, including rural infrastructure development, and builds capacity for rural access planning at the district and provincial level in Lao People's Democratic Republic (Lao P.D.R.). The project is executed by the Lao Government with financial support from the United Nations Development Programme (UNDP) and Swedish International Development Cooperation Agency (Sida) with technical assistance from the International Labour Organisation (ILO).

The IRAP project primarily works with counterparts at the district and provincial level. Village level information, collected through rapid rural appraisals, is feed into the planning process at the district level. The original IRAP project, in fact, is a project that fosters collaborative decision making at the district and provincial level. Different stakeholders jointly identify and prioritize interventions based on common grounds: the village data. Villagers only have limited influence on this process. To strengthen the involvement of communities, the ultimate stakeholders, and to let villagers participate in the planning, design and implementation of projects, a joint project between IRAP and ESCAP was conceptualized to modify existing community-based techniques and integrate them into the IRAP planning environment. The project started in late 1996 and was completed in early 1999. It enriched the IRAP process in that it developed, tested and to some extent integrated community participatory techniques into the process, namely Appreciation, Influence, Control (AIC) into the planning

phase, Stakeholder Participation (SP) into the design phase and Labour-based Methods¹ into the implementation phase.

This issue-paper on "Community Participation in Rural Infrastructure development" is a first attempt to better integrate community dialogues and community participation in the IRAP access improvement process. It is the fourth paper in a series of five. The IRAP project intends to produce 5 different issue papers in dealing with the following topics:

1. Access and Income Generating Activities (final)
2. Guidelines on Integrated Rural Accessibility Planning (final)
3. Guidelines for Rural Road Planning (final)
4. Community Participation in Rural Infrastructure Development (final)
5. Prioritization Techniques and Village Selection Procedures (draft)

The issue papers document experiences supported by different donors (UNDP, Sida, ILO and ESCAP) and are meant to stimulate and guide discussions to improve the IRAP planning procedures in Laos and other countries where activities are ongoing such as Indonesia, Cambodia and the Philippines. Any comments, suggestions or criticisms are welcome and should be addressed to the IRAP office in the Rural Development Committee (RDC) of the Ministry of Communication, Transport, Post and Construction (MCTPC), Vientiane, Lao P.D.R..

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¹ The promotion of labour-based methods, in fact, is nothing new. IRAP and Labour-based Technology are both approaches developed and promoted by ILO and links between the planning and implementation process are obviously existing and strong.

Integrated Rural Accessibility Planning Community Participation in Rural Infrastructure Development

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1. Introduction

Background

This issue paper is about rural infrastructure planning and community participation. It is partly based on the experiences from the Pilot Project on Participatory Planning of Rural Infrastructure (PPRID) and partly on the efforts of the Integrated Rural Accessibility Planning project (IRAP) to better integrate community participation in its effort to improve rural access in general and rural infrastructure in particular.

Community participation is a process whereby beneficiaries influence the direction and execution of development projects rather than merely receiving a share of projects benefits. It has been demonstrated time after time that communities are perfectly able to identify their real problems and to define interventions that are best suited to their real needs.

Top-down planning of small-scale rural infrastructure projects without consulting the villagers has often proven to be an ineffective approach and may result in ineffective projects and a waste of resources. Rural infrastructure projects should address **the real needs** of the **local people** and should optimize the use of local resources from a cost perspective. To the extent possible, they should be planned, designed, implemented and maintained in the communities, by the communities and for the communities.

A case study on best practices in community-based rural infrastructure planning, commissioned by ESCAP, concluded² *“that the taking of responsibility by people for their own development is a better way to achieve improvements in economic and social conditions, and it is more likely to be successful, cost effective and sustainable. This way of organizing development is appropriate because it:*

² ESCAP Reducing Poverty by Improving Accessibility

- *Gives local people a direct and active stake in organising themselves to develop their areas economies*
- *Encourages the mobilisation of local resources such as land, labor, savings, assets, plus indigenous knowledge of specific local conditions such as environmental and socio-cultural norms*
- *Helps build the capacity of the people to effectively plan and implement projects*
- *Increases community control over resources and development and promote greater self reliance*
- *Enhances the sense of community ownership needed to ensure maintenance of completed projects*
- *Encourages more equitable distribution of benefits because project management is accountable to a more representative community"*

Effective community participation requires communities "ready" to participate and government departments and agencies "ready" to work with communities. Creating an enhanced environment which facilitates sustainable and self-reliant socio-economic development is often a necessary pre-requisite for effective community participation. The PPRID project aimed at creating such an environment. The IRAP project now seeks to harmonize community participation with standard local level infrastructure planning procedures and to come up with an integrated approach. This paper therefore will not address the issue of how to create this enabling environment but rather concentrates on experiences from the PPRID project and identify options to integrate community participation into rural access and infrastructure planning processes.

Community Participation

Many books have been written about community participation and related subjects. It is therefore also not the purpose of this paper to contribute to the ongoing conceptual discussion but merely to identify procedures to augment the level of participation in rural access and infrastructure development efforts within the context of the IRAP planning cycle. It might be useful however to take note of the following statements: *"community participation means different things to different people and herein lies the greatest challenge to the adoption of the approaches which advocate community participation³".*

ESCAP describes community participation as follows: *"An active process whereby beneficiaries influence the direction and execution of development projects rather than merely receiving a share of project benefits. The objectives of community participation are recognized as social empowerment, building beneficiary capacity, improving project effectiveness and project cost sharing⁴"*

³ Dee Jupp Community Participation in Rural Infrastructure Development

⁴ ESCAP Reducing Poverty by Improving Accessibility

The World Bank maintains a similar definition *“participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them”*⁵

The World Bank furthermore affirms that *“the participation of beneficiaries is central to the effective delivery of rural infrastructure; for participation to be successful, beneficiaries must be involved in decision making related to planning, design, implementation, operation and maintenance of rural infrastructure; they must also contribute in kind or cash at such a scale as to gain a sense of ownership of the infrastructure and a commitment to operating and maintaining it”*⁶

It is clear that the stakeholders should be involved in all steps of the planning process and project cycle. It is necessary however to take account of local reality. Changes should not be too abrupt and it is recommended to take small incremental steps towards change. We can not expect a more flexible bottom up process to suddenly replace an existing, more rigid, top-down process. Pilot projects could assist in building local capacity and raising awareness about the benefits of community participation and could serve as an example for other areas. This has indeed been the main objective of PPRID.

Rural Access, Transport and Infrastructure⁷

All households, rural and urban, poor and rich, need to have access to facilities, goods and services in order to fulfill their basic, social and economic needs and be able to live a social and economic productive life. The Longman Dictionary of contemporary English defines access as the “means or right of using, reaching or obtaining”. Accessibility has three elements:

1. *the location of the households;*
2. *the location of the facilities and services;*
3. *the transport system to bring 1 and 2 together.*

Rural access could be defined as the ability, the level of difficulty, of rural people to use, reach or obtain the necessary goods and services. Access is inversely related to the time, effort and cost necessary to reach locations where one could avail over goods and services.

⁵ World Bank Participation Sourcebook

⁶ World Bank Lao PDR Sector Memorandum: Priorities for Rural Infrastructure Development

⁷ For a more detailed discussion on access, transport and infrastructure see the other issuepapers produced in this series.

Rural people's access needs can be grouped in three broad categories:

1. those associated with basic needs such as water supply, firewood and food security;
2. those associated with the social welfare aspects of rural life such as health and education;
3. those associated with the economic welfare aspects of rural life such as agriculture, livestock, cottage industry.

Transport and access are interwoven. Improving transport to enhance mobility, however, is only one of the means to improve access. One author determined that *"the heart of the problem is accessibility, determined by the location of different points of satisfaction on the one hand, and on the other by people's ability to reach these points (the notions of transport and mobility). Accessibility can be defined in terms of ease (in terms of time, effort and cost) with which a need can be satisfied" ...and..."that transport is in reality a means to an end, and that the end is gaining access⁸"*

Access can be improved in two fundamental and complementary ways:

1. through a better siting of basic facilities and services that rural people need to use (water supplies, schools, health centers, markets); and
2. through improving the mobility of rural people so that they can travel faster, easier, more convenient and less expensive (rural roads, tracks, trails, footbridges, waterways).

The first is a **"non-transport intervention"** while the second is a **"transport-intervention"**. Both interventions could entail the construction of infrastructure. Access, transport and infrastructure obviously are closely related concepts.

A minimum level of rural infrastructure (access), and the necessary services that go with it, is essential, although in itself not sufficient, for the socio-economic development of rural communities. Improved infrastructure with an adequate level of services improves accessibility which in turns advances rural development.

As brought up before, infrastructure development should address the real needs of the rural people. Decentralization is essential for the appropriate development of small-scale rural infrastructure projects and it is essential that all partners concerned, including the communities and the lowest levels of administration, are actively involved. Most infrastructure are so-called public goods, which

⁸ Accessibility Planning and Local Development – Kanyama Dixon Fyle (Geneva 1998) ILO – Rural Accessibility Technical Papers No. 2

sometimes restrains the mobilization of local people. Creating a sense of ownership is therefore double important.

Integrated Rural Accessibility Planning (IRAP)

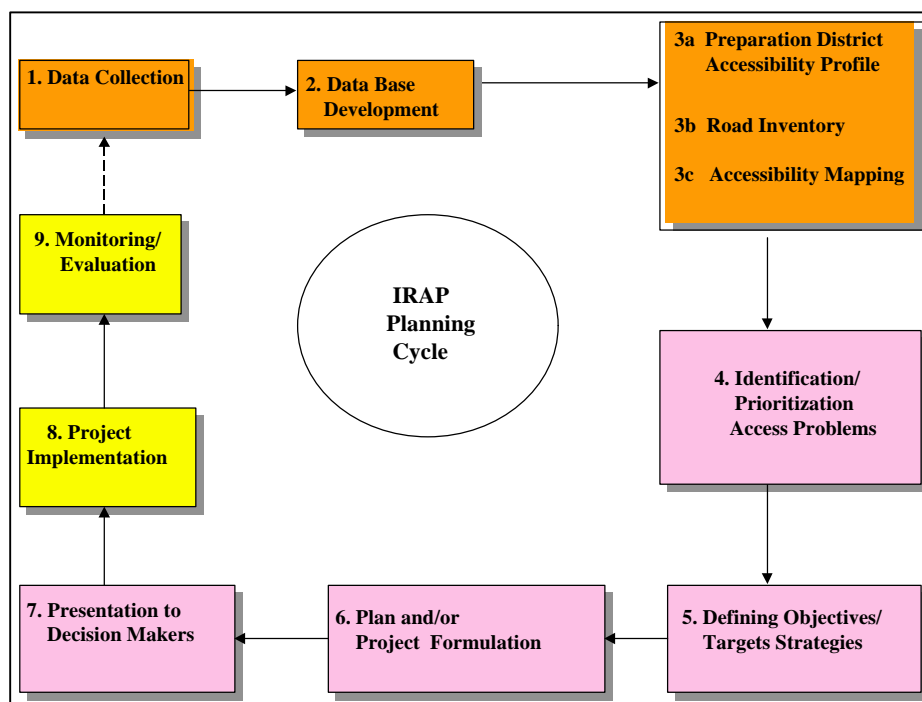
IRAP is one component of ILO's world-wide Employment-Intensive Programme (EIP) with the main objective of *providing poorer population groups with employment and access to basic infrastructure and services.*

IRAP is a local level planning process based on accessibility as it's main area of concern⁹. The process evolves from the assumption that a lack of access of rural people to goods, resources and services is one of the fundamental constraints to their development. The planning procedures that IRAP seeks to introduce follow a bottom-up approach, are participatory and respond to the real needs of the rural population. It has been designed to assist local Governments, communities and donors to identify their infrastructure priorities and define appropriate interventions. IRAP is not a community participation process per se. However as part of its toolkit it introduces and promotes existing community participation procedures and pursues a satisfactory involvement of the ultimate stakeholders, the local administration and villagers, at all steps of the project cycle. Involving the local administration often proved to be less cumbersome than involving the local villages.

IRAP has adapted a bottom-up approach towards rural infrastructure planning. IRAP however primarily works at the district level and a question that often arises is how to possibly involve all villages and their people in the decision making process. The traditional IRAP approach only involved communities, in a restrained manner, during the problem identification stage. In fact, the IRAP approach started at the district level. The PPRID project provided an extra dimension to the IRAP approach in that it brought activities down to the village level.

The following figure shows the IRAP planning process.

⁹ IRAP Issue Paper No 2: Guidelines on Integrated Rural Accessibility Planning

Figure 1: IRAP planning cycle

Participatory Project on Rural Infrastructure Development (PPRID)

The PPRID project was a joint undertaking by ILO and ESCAP. UNDP provided the funds and the IRAP project took full responsibility for implementation. The main objective of PPRID was to develop and demonstrate a participatory planning and implementation process adopting community-based approaches.

“Community participation was the central point around which the pilot project evolved with a view to improving the quality of life of the rural poor, and making them more confident and self-reliant (ESCAP¹⁰)”

The project “brought IRAP down to the village level” and developed a combined approach for rural infrastructure development. It undertook all activities of a project cycle: planning, design and implementation. Villagers and institutions at the district level participated actively during all three stages of the process.

¹⁰ ESCAP/UNDP Guidelines for Participatory Planning of Rural Infrastructure

Participation of local government institutions is often as important as village participation. During a follow-up visit PPRID project staff was commended by their local government counterparts for actively involving the local institutions at the district level. A parallel project implemented by another organization failed to involve the local government institutions and, according the district representative, can not count on their support when problems with the local communities would arise.

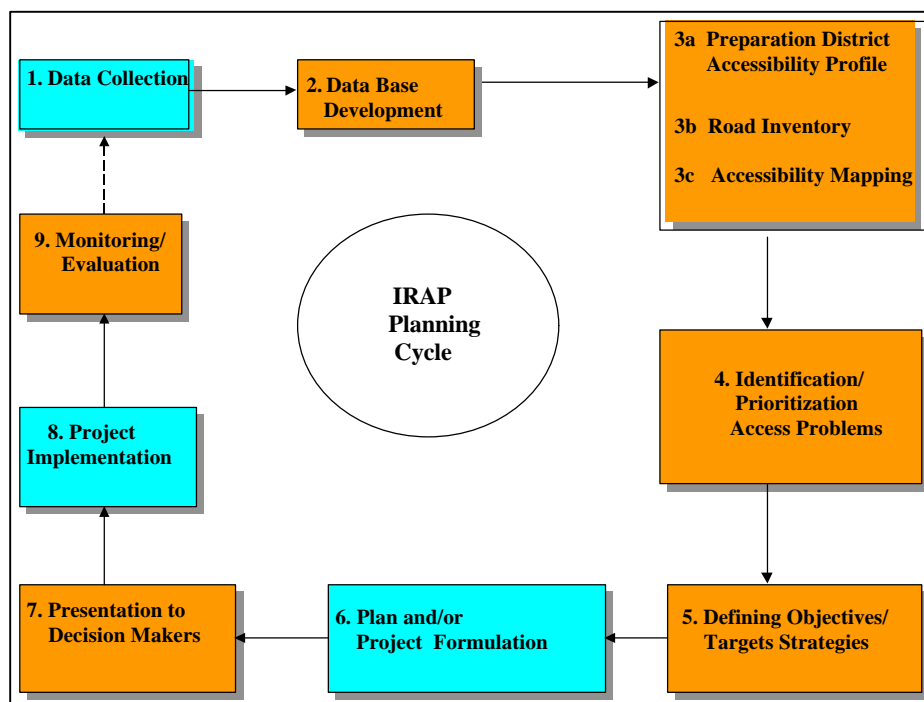
The PPRID project demonstrated community-based integrated approaches to planning and implementation of rural infrastructure projects. The project has shown that *“the capabilities of communities to play active roles in rural development can be enhanced through participatory and collaborative approaches”* and *“given the opportunity, rural communities can improve their potential to find effective and relevant solutions to their problems”* and *“by adopting community participation techniques, the communities were trained to identify and prioritize their needs, and to formulate plans of action to address those needs cost-effectively”*¹¹

¹¹ ESCAP Reducing Poverty by Improving Accessibility

2. Planning

The objective of this paper is to introduce a demonstrated procedure for assisting rural villages to better participate in the planning, design and implementation of small-scale rural infrastructure projects and to point out where and how this process can be integrated in the standard IRAP planning cycle.

Figure 2: IRAP planning cycle



It seems that communities could effectively be involved at three different stages:

Planning:
Design
Implementation

Community participation has to be seen from the perspective of the community and from the perspective of the local Government. Communities are mostly concerned with their own environment “the village” and identify priorities primarily to benefit the village inhabitants. District authorities, on the other hand, have a wider perspective and identify priorities for a number of villages. In addition, they consider economics of scale and areas of influence of roads, health centers and schools. From a community point of view, for example, having a health center in their village may seem a first priority but from a district point of view this may not be a priority at all.

IRAP has evolved as a tool to primarily assist local Governments in taking decisions concerning rural infrastructure investments. The process however, in whole or in part, could also be applied by donors and communities to identify and prioritize access improvement projects including rural infrastructure.

The IRAP process encourages local level planners to involve communities in the identification, design and implementation of projects. Maintaining a dialogue with communities during all stages of the planning process, identifying needs, defining solutions and priorities, selecting projects and carrying out the projects identified, is necessary to ensure the full involvement of people. Active community participation however, at all stages of the planning process, is not always possible as the example below illustrates.

An average district in Laos counts a 100 villages. District offices are poorly staffed and it is unattainable for district staff to have a community dialogue with every village. IRAP therefore recommends a two step approach. Use the standard IRAP Village Survey to collect base data for every community on socio-economic characteristics, access, problems and priorities. This data can be analyzed and indicators describing the situation in a village can be developed to identify priority zones or prepare a “shortlist” of priority villages. Once the priority villages have been identified it is recommended to use a proven community development technique to confirm the priorities and involve the communities in the further planning, design and implementation of projects.

Step 1: Collect data in all villages ⇒ Use IRAP Village Survey

Outputs

- Detailed data base
- Base information on village problems and priorities
- Village indicators

Step 2: Start the community dialogue ⇒ Use A.I.C.

Outputs

- Confirmed priorities
- Community participation in planning

IRAP Village Survey

The standard IRAP process is applied at the village level using a Rapid Rural Appraisal technique to collect relevant data. People's needs in this process are identified through a survey of the community. Although people have the opportunity to identify problems and priorities for interventions, in fact, the district authorities decide for them. Village participation at the planning stage is limited to a short interaction with the enumerators during the actual data collection exercise.

IRAP's traditional data collection tool "surveys" the community and collects a range of socio-economic and access data. Communities have the opportunity to identify their problems and express their priorities during a 3-4 hour interview. This information is feed back into the planning process at the district level without further involvement of the communities until the project design phase.

Appreciation, Influence Control (A.I.C.)¹²

The PPRID project adopted a technique, developed in the United States and widely used in Thailand and other countries, labeled "Appreciation, Influence, Control (A.I.C)", to conduct village meetings. During this process villagers are involved for a longer time (up to three days) and produce a future map of how they would like to see their village develop while identifying activities they could do by themselves and activities for which they would need external assistance. The A.I.C. approach is succinctly illustrated below:

The A.I.C. Approach

- | | |
|--------|---|
| Step 1 | Identification of a group of villagers |
| Step 2 | Dividing the participants into three groups; men only, women only, and a combined group of both men and women |

¹² The World Bank Participation Sourcebook summarizes A.I.C. as follows " a workshop-based technique that encourages stakeholders to consider the social, political, and cultural factors along with technical and economic aspects that influences a given project or policy. AIC helps workshop participants to identify a common purpose, and creates an enabling forum for stakeholders to pursue that purpose collaboratively. Activities focus on building appreciation through listening, influence through dialogue, and control through action."

- Step 3 Each person drawing a map of his/her village in the present form and explaining it to his/her group
- Step 4 Each person drawing a picture of his/her village as he/she would like to perceive it in the future. This allows the participants to give some thought to identifying ways and means for improving their quality of life through better infrastructure facilities and services in the village
- Step 5 Consolidate all the drawings into a single picture of the village with all the details. This helps to enhance team spirit in the community towards achieving goals
- Step 6 Each group listing its priority needs and identifying a range of activities that could be undertaken in the village to address those needs
- Step 7 Consolidate the three lists and asking all participants to arrive at a consensus on a single list of proposed activities for implementing in the village
- Step 8 Dividing the proposed activities into three groups:
- Those which can be implemented at the village level;
 - Those warranting the involvement of the public and/or private sectors
 - Those to be implemented fully by the public and/or private sector
- Step 9 Prioritizing the proposed activities
- Step 10 Requesting each participants to indicate the activities in which he/she is willing to participate and/or take the responsibility for its implementation and also provide details of his/her inputs
- Step 11 Asking each group to elect a project manager who is entrusted with the task of preparing a work plan for implementation and presenting it to the village

During the process, communities determine those activities they can undertake themselves as well as those activities which require assistance from Government

or other external organizations. Both women and men are equally involved in the process¹³.

The IRAP Village Survey and AIC technique are probably at different ends of the spectrum. They introduce different techniques to involve communities. The IRAP Village Level Key Informant Discussion is a quick, but shallow, approach to collect information on problems and priorities as perceived by the villagers while the A.I.C. approach offers a more sophisticated, but time consuming, procedure. It is difficult to say which method or which combination of methods is the best. This will ultimately depend on the overall circumstances and the objectives of a programme.

AIC has proven to be an excellent tool when the area of coverage is not too large, as is often the case in donor supported area-development projects. From the district perspective, the problem with having to spend 3 days in 100 or more villages to find out about priorities is that it is very resource intensive. The following table compares some advantages and disadvantages of the two techniques.

Table 1: Comparison between IRAP Village Key Informant Interview and A.I.C. Technique

IRAP Key Informant Interview	A.I.C.
Consultation process	Participation process
Quick process (2-3 hours)	Slow Process (up to 3 days)
Inexpensive	Fairly expensive
Low demand on community (half day participation of 6-8 key informants)	High demand on community (3 days participation of many villagers)
Shallow process	In-depth process
Less gender sensitive	Gender sensitive
Does not really raise expectations	Raises expectations
Minimal training of interviewers	Extensive training of interviewers

Both techniques were undertaken in the pilot villages in Oudomxai. It was interesting to note that the priorities emerging from the two techniques pointed in the same direction. The next box displays and compares the different priorities emerging from the two processes.

☒ IRAP village survey

During the village interviews with key informants¹⁴, interviewees were asked to identify and rank their main access problems and to prioritize projects to overcome these problems. This exercise took place at the end of a two hour interview in which the informants provided the interviewer with information about the general socio-economic conditions in the village and accessibility to

¹³ In Sekong Province (SIP-DEV) it was suggested to include youth as well

¹⁴ Village interviews were conducted in Xai District (November 1995) and Pakbeng District (May 1996)

basic and economic goods and services. Tables 2 and 3 list the priorities that came out of this process.

Table 2: Access priorities - Phonhom Zone (infrastructure priorities)

	Phonhom	Saloungkuang	Houay Khay	Phieng Xai	Houay Top (Nam Veun)	Vang Mon	Na Chang	Houay Hia	Sanang Pi	Houay Tam	Houay Lieng	Houay Laong
Priority												
1	Water	Roads	Roads	Health	Roads	Water	Irrigation	Roads	Roads	Irrigation	Irrigation	Roads
2	Education	Irrigation	Health	Education	Irrigation	Health	Water	Irrigation	Water	Roads	Health	Water
3	Roads	Education			Water	Roads	Roads	Water		Water		Irrigation

Table 3: Access priorities - Mokwen Zone (infrastructure priorities)

	Tengsa	Chomhout	Kengleir	Phouhoung	Phalom	Mokwen	Luangtong
Priority							
1	Water Supply	Road	Water Supply	Road	Water Supply	Health	Education
2	Education	Education	Road	Education	Road	Education	Health
3	Health	Health	Education	Health	Health	Road	Water

☒ Community Participatory Meeting (A.I.T.)

Staff from the district and the provincial Governments were trained by community development workers from the Thai Community Development Department under the Ministry of the Interior in organizing and conducting community participatory meetings. Annex 5 summarizes the procedures of conducting these participatory planning workshop using the Appreciation, Influence, Control (AIP) approach. Trained staff thereupon conducted 2-3 days community meetings in all pilot villages. Tables 4 and 5 list the priorities that came out of this process.

Table 4: Access priorities - Phonhom Zone (all priorities)

	Phonhom	Saloungkuang	Houay Khay	Phieng Xai	Houay Top	Vang Mon	Na Chang
Priority							
1	Road access	Road access	Road access	Road access	Road access	Road access	Road access
2	Water supply	Irrigation surveying	Water supply	Irrigation	Irrigation	Barbed wire	Irrigation
3	Permanent school	Irrigation	Bridges, culverts	Water supply	Water supply	Land clearing for rice fields	Electricity
4	Irrigation	Water supply	Permanent school	Hydropower	Health center	Irrigation	Water supply
5	Hydropower	Permanent school		Health center	Land clearing for rice fields	Permanent school	Meeting room
6	Village office	Training course			Permanent school	Health center	Health center
7		Vehicle			Meeting room		Permanent school
8					Training course		Bridge

9					Land transfer to village
10					Truck/bus

Table 4 cont.: Access priorities - Phonhom Zone (all priorities)

	Houay Hia	Sanang Pi	Houay Tam	Houay Lieng	Houay Laong
Priority					
1	Road access	Road access	Road access	Road access	Road access
2	Land clearing for rice fields	Irrigation	Irrigation	Water supply	Irrigation
3	Water supply	Permanent school	Water supply	Irrigation	Health center
4	Livestock development	Electricity	Health center	Electricity	Water supply
5		Water supply	Electricity	Health center	Permanent school
6		Health center		Permanent school	Electricity

Table 5: Access priorities - Mokwen Zone (all priorities)

	Mokwen	Luang Tong	Tengsa	Phouhoung	Chomhout	Phalom	Kengleir
Priority							
1	Dispensary	Gravity water	Primary school	School	Clean gravity fed water	Gravity fed water	Agriculture support
2	Paved road	Electricity	Clean gravity water	Clean gravity water	Road	Primary school (grade 1-3)	Road
3	Primary school	Primary school		Road	School	Road	Family planning
4	Clean gravity fed water	Dispensary		Electricity	Dispensary	Training	
5		Irrigation			Market		

The best compromise is probably to blend the approaches and apply the recommended two-step approach. This was done with positive results in the PPRID areas. The following box illustrates the combined process put to use.

PPRID Project Planning

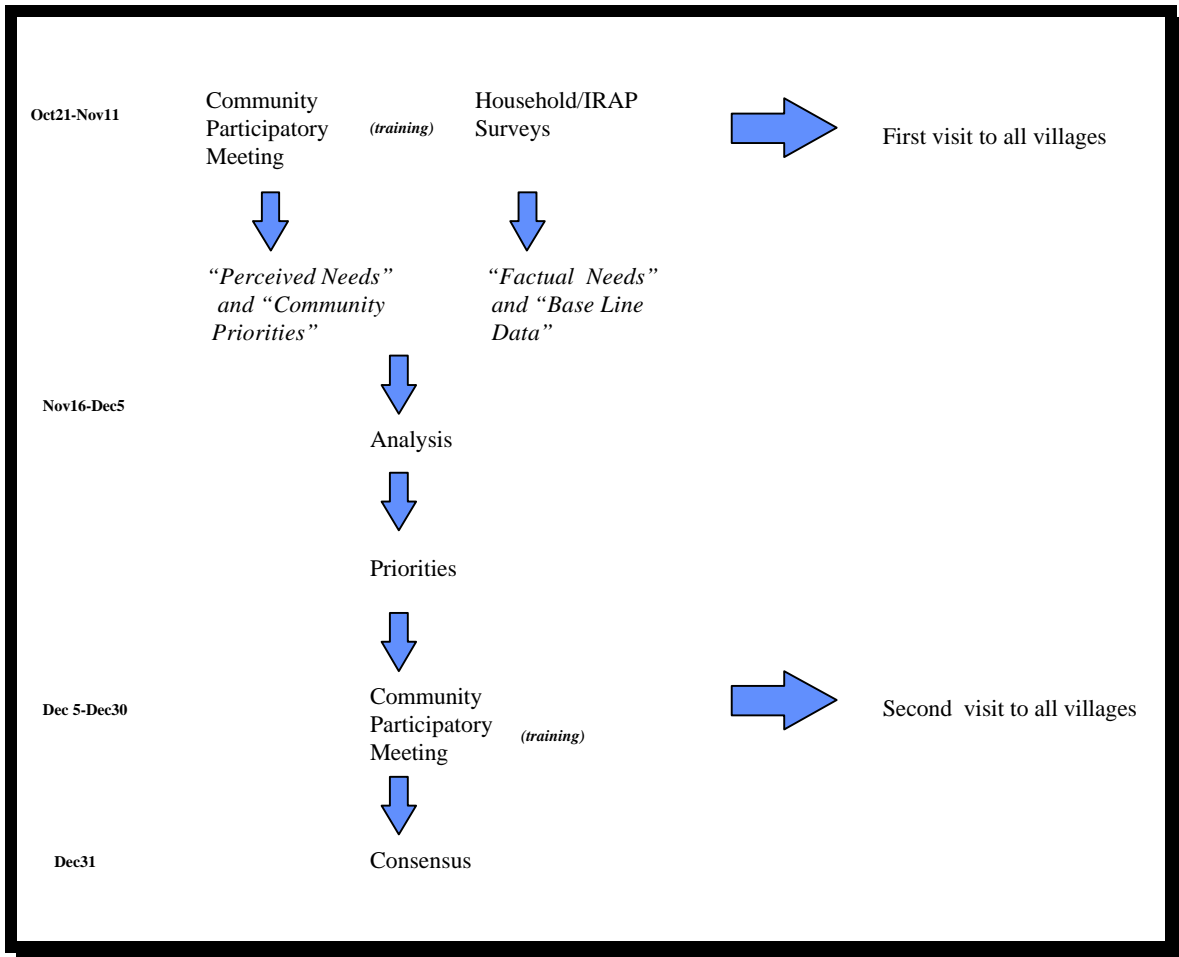
Ensuring maximum community participation was essential for the success of the PPRID project. To ensure sustainability, local staff were involved in the entire process and obtained both hands-on community development training and formal training during the application of the process.

The project had three different phases

1. Planning (village selection (1a) and project selection (1b))
2. Implementation
3. Impact assessment

The planning stage (project selection -1b) took approximately 2 1/2 months. It started with the conduct of a training on “community participation, village mapping and household survey” for local counterpart staff from Oudomxai province, Pakbeng district and Xai district. The following figure illustrates the different steps in the project selection phase. Before entering this phase the general IRAP process (step 1a) was applied to select the priority zones.

figure 1: Identifying village priorities



Mapping

Mapping has always been a cornerstone of the IRAP process and should be an integral part of any village consultation process. The graphical representation of access characteristics in a given area can help in the identification and prioritization of access problems, facilitate the formulation of interventions and guide in the selection of the best development alternatives. The purpose of having the communities preparing the map is four-fold:

1. to provide a clear picture of the (access) conditions in the village

2. to help in the identification of (access) problems and in the formulation of interventions
3. to enhance the communication of information and recommendations to an audience
4. to evaluate the possible impact of projects

Village mapping is a “user-friendly” process, which can easily be understood by village people without any technical training. The map should reflect the actual situation in the village. The map represents the relationship between the villagers and the facilities and services they need. The map could visualize, for example, how the construction of a piped water system could improve the water supply for selected households or how the improvement of a trail could improve transport and access to schools, health centers and markets.

One of the main outputs from the A.I.C. process, indeed, is a consolidated village map built from the individual group maps and representing a consensus on what the villagers want and the beginnings of projects that they may attempt¹⁵. An example map is presented on the next page. Mapping exercises and the discussions they generate are generally helping the villagers to think more about access and development issues.

Villagers could, in addition, be asked to list the places they visit and purpose of such visits. They should draw maps and identify the places and the routes they travel. During this work they could identify the locations where they experience difficulties when travelling and solutions to the problems could be identified and even prioritized from their point of view. Problems could be written on cards and could be moved up and down as a discussion proceeds and prioritization will be made through consensus¹⁶.

Prioritization and Selection of Interventions

IRAP's traditional planning tools are used to prioritize interventions across villages. Communities identify their village priorities based on their perceived needs. The total resources necessary to implement these priority projects may exceed the resources available in the community, from Government or from external donors. The estimated cost of undertaking all interventions identified under PPIDP, for example, was more than 1.2 million US\$. This was far beyond the scope of the project. IRAP's planning tools were thereupon used to select priority interventions. The “most feasible” projects were selected for implementation. The process, proceedings and results were discussed with all communities involved.

¹⁵ ESCAP Reducing Poverty by Improving Accessibility

¹⁶ Dee Jupp Community Participation in Rural Infrastructure Development

Project implementation costs should be estimated before going into the detailed design work, in order to minimize expectations of the communities, using information from identical interventions under similar conditions in other areas. After the costs have been estimated, a simple feasibility study could assess whether the proposed interventions are feasible by relating costs to the expected benefits.

3. Design

A detailed survey and design of the project should not be undertaken until a possible donor, internal or external, has been identified to avoid further raising existing village expectations. Participation in project survey and design may become counterproductive and jeopardize future initiatives if funding possibilities do not exist and designing projects remains merely an academic exercise.

Once the priorities have been identified, a technical team needs to survey and design the projects¹⁷. If funding possibilities exist then communities should participate in finalizing the design of projects. This participation should not be limited to an exclusive agreement on village contribution or local inputs but should include interaction on technical details and costs as well. With the cooperation of the local people, a design and a cost estimate for undertaking the proposed intervention needs to be prepared. The final design of the interventions is a social, iterative, process between experts and local people.

Villagers not always correctly prioritize their needs. Often people only consider the benefits of interventions and while prioritizing village needs, basic information about the cost and labour effort of projects is often not seriously taken into consideration. During the design phase however costs and local contributions are taken into consideration and project components may change or, sometimes, the complete project may be rejected and changed for something else.

To maximize the use of scarce resources and optimize village ownership and sustainability of the interventions, it is recommended to maximize local contribution. This often include inputs to be provided by the villagers at no cost.

¹⁷ Another approach would be to start with community involvement right from the start of the design.

Their inputs have to be established through negotiations and this has to be formally agreed upon through a contract. Agreement with communities, often, are crucial for the success of community-based approaches. These agreements could be formal in the form of a contract or informal. An ongoing irrigation development project in Lao cautions *“The step of having written agreements might work well with regards to giving villagers and staff their responsibilities. However in the Lao context we have to be aware of the danger of becoming too intellectual. Firstly the CDA¹⁸ should see the achievement of a written agreement as a product of a preparatory development process. There is a danger that CDA or government staff try to achieve the goal, a written agreement, without following the process properly. Secondly, an agreement in itself is foreign to Lao culture where things are more organically and according to intuition. Although it is hard to base rural development on intuition, at least villagers should have a long time period to get used to a different way of going about things. Thirdly, a written agreement automatically presents a big obstacle to illiterate women. Illiterate women might still feel part of the agreement when they would have a representative who can read and whom they trust. But more often than not, there is no such representative available or this representative does not get a chance¹⁹”*

In the PPIDP, villagers were willing to provide labour at no cost to the project on the basis of one person per household during a period of three months in the dry season equivalent to 60 working-days per household. As discussed earlier, during the design phase it may appear that certain projects are technically not feasible. The villagers might have underestimated the volume of work necessary or might have missed out on certain technicalities. This point is further illustrated by PPRID. While conducting the survey for the Sanang Pi irrigation scheme²⁰ it was found that the existing canal could not be used for irrigating the rice field as it had no proper gradient to draw water from the intake to irrigate the field *“Construction of a new canal and shifting the intake location about 400m upstream of the existing intake was required in order to irrigate the land. This would require an additional 1000 mandays’ labour input equivalent to US\$ 2000²¹”*. As a result of this additional workload, the villagers decided to review their priorities. Afterwards they requested the project to change the intervention since the proposed irrigation scheme was no longer a top priority. Instead, a water supply improvement project, with less labour input, was selected as a first priority. This example is significant in that it emphasizes the importance of involving the communities during the survey and technical design in order for them:

¹⁸ Community Development Assistant

¹⁹ FIAT Project

²⁰ The irrigation scheme in Sanang Pi village was identified as a number one priority project by the villagers and was initially included in the list of projects to be supported under PPRID.

²¹ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

- To understand why projects are or are not feasible and why, sometimes, changes in the design have to be made
- To provide necessary inputs for technicians carrying out the survey and design work
- To be able to base future village decisions on technical information and facts

Another proposal for a change in village priority projects came while drafting the labour supply agreement between the villagers of Mokwen village and PPRID. Villagers were no longer willing to provide labour inputs since there was a sudden uncertainty about the future location of the village. An ADB supported project failed to consult the villagers and constructed a health facility in Mokwen village. Shortly after completion the entire village relocated to another province. Again, this example demonstrates how important it is to involve communities in all activities.

Village contributions

People need to understand what they commit once designing a project. What does it mean in practical terms if the community, for example, commits itself "transporting the construction materials". The following excerpt coming from the World Bank's Participation Sourcebook illustrates this point: *"The absence of sufficient "commitment" in many of the projects the bank finances comes, we believe, mainly from the external expert stance, in which small groups of experts ask the other stakeholders to commit themselves to a project the experts have designed. Even if these stakeholders do so, they often have not learned enough to understand fully the commitment they are being asked to make. Nor have they learned enough to judge their ability individually and collectively to fulfill it. We need to be clear that commitments made under such circumstances cannot be relied on²²).*

Most villages in the more remote areas in Lao live at or near subsistence level and can usually not contribute any cash to the project. Their main contribution will be labour for transport and construction and collection of local materials such as sand, gravel, stone and wood. The PPRID project concluded *"in order to make best use of their free time it is very important to organize several meetings with the villages prior to the construction; to make a workplan, to explain the extent of work, to prepare the villages to take responsibilities and to properly define the task of each individual family²³"*

²² World Bank Participation Sourcebook

²³ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

Village labour contributions have to be carefully scheduled as food shortages may occur and people return to their slash-and-burn fields earlier as expected. PPRID has confirmed that it is unrealistic to expect people to contribute labour for more than 5 months.

Village contribution can take different forms. The construction of the PPRID priority road included a mix of machinery and labour. The local villagers agreed to take responsibility for the construction of 9 moderate crossings and repairs and maintenance of the road after construction. Activities included the collection and hauling of local materials and the provision of unskilled labour for construction. In lieu of wages, the villagers were paid into a village revolving fund. Establishing a revolving fund by pooling the savings earned with labour-based infrastructure works is an interesting alternative to foster rural development in a village. This option needs to be further explored in the future. Funds could be used for private activities such as buying seeds or fingerlings or public activities such as improving the water supply or sanitation. If people are paid into a revolving fund in lieu of salaries, it is important that each family understand that their contribution remains “their own money” rather than a public village fund. It is equally important that assistance is provided to the villages to administer and utilize the fund

The following example summarizes the possible village contribution, in terms of labour, to proposed infrastructure projects in the PPRID areas in Oudomxai province:

Project	Contribution
A School in Phouhoung Village	Informal discussions with villagers has established that they are willing to consider providing labour at no cost to the project on the basis of 15 persons per day during a period of three months in dry season. At other times they would be involved in their subsistence activities and consequently would require wages to pay for food and other necessities which they would not be able to produce because of working on the intervention. This would amount to 900 person-days and would cover about 16 per cent of total labour requirements for transportation and construction of the intervention
A Road in Pakbeng District	There have been two labour based roads built in Oudomxai province. For both of these roads a precedent was set whereby labour was paid a nominal wage (around USD 1 per day). Given the large volume of work to be undertaken it is unlikely that there would be any contribution in kind for the construction of the road

A Village Water Supply in Na Chang Village	Informal discussions with villagers has established that they are willing to consider providing labour at no cost to the project on the basis of one person per household during a period of three months in dry season. At other times they would be involved in their subsistence activities and consequently would require wages to pay for food and other necessities which they would not be able to produce because of working on the intervention. The labour contribution of villagers would amount to 1,440 person-days which is more than sufficient to cover the estimated 557 persons-days of unskilled labour required for transportation and construction in this intervention.
A Small Scale Irrigation Project in Houay Laong Village	Informal discussions with villagers has established that they are willing to consider providing labour at no cost to the project on the basis of 20 persons per day during the dry season for three months. The villagers not owning the land also are happy to help the land owners with a feeling that the implementation of such a project is for the benefit of the village in general. The contribution of the villagers would amount to 1,200 man days and would cover about 40 percent of the unskilled labour required for transportation and construction.

It is important here to reiterate that participation is more than just contributing in terms of labour, materials or cash. This point is taken by Dee Jupps and summarized in her paper on "community participation in rural infrastructure development written for the Bangladesh Second Rural Roads and Markets Improvement and Maintenance Project: *"For many the idea that poor unskilled and uneducated people can contribute anything to development initiatives undertaken on their behalf beyond their labour and cash is unthinkable. They feel that planning decisions, including site selection and choice of technology, should be left entirely to the technical experts. If participation is embraced at all, it is limited to involving villages in manual labour and local cost sharing. It is assumed that contributions of cash and physical labour constitute a willingness on the part of the people to participate and indicate a commitment to the development scheme. This, in turn, is assumed to generate a sense of ownership of the facility and collective pride which will ensure its maintenance.*

These assumptions have been proved over and over again to be dubious. The fact is people will not value anything which does not meet their needs. If the location is inconvenient, the service too expensive and inadequate to meet their needs then regardless of whether they were involved in construction or cost sharing, the facility will not be used, will gradually fall into disrepair or will be abandoned altogether. There could have been a number of reasons why they became involved in the construction which may not correlate with the usefulness of the scheme. For example, it may have been regarded as a chance for earning daily wages, albeit minimal, or they may have been coerced by influential leaders²⁴". These words, again, emphasize the importance of involving the communities during the inception of projects.

²⁴ Dee Jupp Community Participation in Rural Infrastructure Development

4. Implementation

Broadly spoken, community participation in Lao P.D.R. seems to be, with the possible exception of the irrigation sector, more on an ad hoc basis. The World Bank's sector review of rural infrastructure, confined to three sectors, namely, rural roads, irrigation and water supply and sanitation, looked to beneficiary participation in these sectors²⁵. The report identifies, inter alia,

Irrigation

The bulk of these (irrigation) schemes were built entirely by farmers who have operated them without assistance from outside the community. The great advantage of these schemes is that, being built, operated and maintained by farmers themselves, they are sustainable....

The Ministry of Agriculture and Forestry has established at national and local levels organizational units to organize farmers into water user organizations (WUO) and provide them with the required training....

While information is unavailable on how many formal WUOs have been formed, indications are that the new irrigation schemes that have been initiated in the 1990s involve the formation of WUOs to manage and own them....

Water Supply and Sanitation

There are no formal organizations of beneficiaries in the water supply and sanitation sector....²⁶

²⁵ World Bank Lao PDR Sector Memorandum: Priorities for Rural Infrastructure Development

²⁶ this will soon change with the implementation of the next phase of the Sida-World Bank supported Water and Sanitation Project introducing community participation in village water and sanitation improvements (footnote by author).

However, the village is often used as a basis to organize WUO which are required to be in place before GOL and donors provide support for the construction of water supply and sanitation facilities....

Rural Roads

There are no specialized community organizations representing beneficiaries in the rural roads sector....

There are reported cases where villages have received from GOL tools and equipment as well as technical support to build minor village roads using their own labor and local materials....²⁷

The common approach of planning, construction and maintenance of rural roads is to use the government road organizational agencies at provincial and district levels, and not the communities: it is a largely supply-driven approach. Institutional mechanisms of involving communities in rural road development are still elusive....

PPRID is one of these “ad-hoc projects” experimenting with community participation. After participating in planning and design, the communities took responsibility for implementing the selected projects. Technical assistance came from the PPRID project and the district and provincial sector specialists. In Sanang Pi village, for example, in Oudomxai Province, under PPRID, a gravity-fed water supply system with a 1400 meter long pipe and 4 tap stands was completed in 22 days. The villagers provided labour and local construction materials. Technicians from the provincial Health Department and the IRAP/PPRID project provided technical inputs.

It is important that designs are flexible and, if required, changes can be made during project implementation. The following example comes from Phouhoung village, under PPRID, “during construction, difficulties were encountered with transportation of sand from the Mekong and with the preparation of wood. Consequently part of the concrete and masonry work was reduced. Concrete flooring was limited to one room only (teacher’s room); other rooms were constructed with earthen floors. A wood sawing machine was hired for cutting and sawing of about 7 cubic meter wood (30% of total). Wood for furniture (13 cubic meter or 55%) was purchased from a saw mill. The rest of the wood necessary was provided and prepared by the villagers. It appeared that the villagers, at the end of the construction period, no longer had sufficient food to

²⁷ For example, the ILO projects in Oudomxai and Savannakhet, GTZ project in Louang Namtha, UNCDF project in Xiengkhouang and ESCAP/ILO IRAP/PPRID project in Oudomxai.

feed themselves and PPRID decided to distribute rice during the final phase of transporting wood and furniture to the village²⁸.

The preparation of workplans and tasks is an essential activity to secure smooth implementation. Villagers need to understand when and what to contribute. Proper guidance to prepare workplans and define individual tasks should come from the district authorities or project. While making a workplan it is advisable to subdivide complex activities into several simple tasks in order for the villagers to understand their contribution and being able to execute these tasks.

PPRID showed "that when involving the community, school buildings could be built at 30-40% lower cost compared to a contractor. However more management and supervision inputs are required²⁹"

It is important to clarify and agree upon the roles and responsibilities of the communities prior, during and after project implementation.

Participation should rest on the willingness of the villagers to participate and should not be externally imposed. Forced labour on construction projects is far from the philosophy behind community participation and could work in the wrong way

It is necessary to provide limited training to the villagers in implementing interventions. Before starting the construction works, PPRID, provided a brief training to the villagers *to familiarize them with the design considerations and extent of work they were required to undertake in association with the project. Emphasis was given to use cement, sand, gravel, stone in proper way so that the structure could last long. Similarly, the importance of digging trenches for water supply pipe lines to the required depth and the laying of pipe and protection works were explained so that the villagers could understand the need for adhering to the design standards³⁰*. It is equally necessary to supervise the work and provide timely technical inputs if necessary. Villagers in Mokwen zone, Oudomxai Province, had accepted the responsibility to provide sand to mix with cement for the construction of their new school. They carried the sand from the Mekong river, uphill, over a distance of 5 kilometers only to see that the following day a severe downpour washed most of their efforts away. During the implementation of a community participatory project it is recommended to have

²⁸ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

²⁹ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

³⁰ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

an ad hoc community organizer present in the village to organize, motivate and help to organize the project beneficiaries to implement the project.

In addition people need to be trained in operation and maintenance issues. The PPRID project understood this requirement and *“a one day’s training was provided in each of the villages ... for maintenance of water supply schemes built in those villages. Similar training was provided for maintenance of irrigation schemes and water management”³¹*.

Maintenance activities need to be supervised and technical assistance needs to be provided if necessary. After completion of the road in Phonehom zone, Oudomxai Province, the road and maintenance responsibilities were handed over to the communities. The villagers were provided with the tools used in road construction, the district agreed to provide technical support, if necessary, and the province decided to allocate a sum of 80,000 kip per kilometer which would go direct to those villages involved in the maintenance programme.

An effective example of community operation and maintenance comes from Africa, Madagascar:

Training of community groups in Madagascar³²

In Madagascar, community groups manage funds for the maintenance of selected community roads. These funds are generated through road tolls supplemented by provincial and external sources. A village committee presided over by the mayor is responsible for the organization, payment and supervision of road-maintenance workers from the village. Training on the setting-up and management of the “village maintenance fund” is provided to the Village Executive Committee (mayor and works supervisors) by a specialized NGO.

The Committee members also receive technical training in road maintenance works from the Ministry of Works supervisory staff attached to the Ministry’s labour-based road programme. The same staff also provided initial training and monitoring guidance to the maintenance workers. Local participation in all phases of the setting-up of this maintenance system (awareness raising through problem analysis, relations with different Government administrations, financial management, organization of the works) was found to be essential to ensure local “ownership” and participation. Only in these conditions can the technical training have the desired impact.

³¹ Poudel Prithi: An Experience in Implementation of UNDP/IRAP/ESCAP activities in Lao PDR (Oudomxai Province) - Draft

³² David Tajzman and Jan de Veen: Employment-Intensive Infrastructure Programmes (ILO)

In conclusion, in Lao P.D.R. the PPRID project has demonstrated that communities can successfully participate in the development of their rural infrastructure if this opportunity is given to them. Optimizing the use of local resources (construction materials, labour) reduces the cost of most small-scale infrastructure works and enhances sustainability. In addition it creates an income and multiplier effect in that rural communities experience a short-term capital injection. Assisting communities to identify their priority infrastructure needs through a community participatory approach also prepares them for the broader task of effectively identifying and prioritizing other development needs.

The private sector should be encouraged to further assist communities with sustainable income generating opportunities (micro-enterprise development, cash-cropping, livestock, aquaculture etc.), credit and watershed management. A community revolving fund could be established and used to contribute to other development initiatives and partnerships.

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