

***MINISTRY OF COMMUNICATIONS, TRANSPORT,
POST AND CONSTRUCTION***

International Labour Organisation



**PROJECT LAO/95/001
“INTEGRATED RURAL ACCESSIBILITY PLANNING”**

***Issue Paper 2
Guidelines ON Integrated Rural Accessibility Planning
“The Lao Experience”
October 1998
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List of Abbreviations

ADB	Accessibility Data Base
DPC	Department of Planning and Cooperation
EIP	Employment-Intensive Programme
ILO	International Labour Organisation
IMT	Intermediate Means of Transport
IRAP	Integrated Rural Accessibility Planning
IRTP	Integrated Rural Transport Planning
Lao PDR	Lao People's Democratic Republic
MCTPC	Ministry of Communication, Transport, Post and Construction
RDC	Rural Development Committee
UNDP	United Nations Development Programme
Lao PDR	Lao People's Democratic Republic

Foreword

The groundwork laid by the ILO during the late eighties on the different aspects of rural transport¹ was integrated and developed as a pilot project for two areas in the Philippines² (1989) in order to develop an Asian perspective and for three areas in Malawi (1991) in order to develop an African perspective. Although sharing the overall goal of improving rural accessibility, the two projects had somewhat different objectives, strategies and activities. In the Philippines the main emphasis was on developing a **decentralized access planning methodology** and **capacity building for access planning** at the local Government level. In Africa the emphasis was less on capacity building and more on identifying, implementing and pilot-testing interventions to improve rural transport.

In early 1990, the experts working with the pilot project in the Philippines agreed that the original objectives of the exercise had changed and that the scope of the pilot project had become wider. They therefore decided to replace the African acronym (IRTP = Integrated Rural Transport Planning) with a new acronym (IRAP = Integrated Rural Accessibility Planning). The initiation of the IRAP pilot project soon attracted the interest of the Government, which supported the expansion of the process, particularly because of its relevance to the new policy of decentralization. A set of guidelines was produced in 1994³ to guide practitioners through the IRAP process as developed in the Philippines.

The IRAP project in Laos, as an off-spring of the Philippine project, started in August 1995. The IRAP process was modified after pilot-testing it in two Lao provinces. Although the principles are the same, the IRAP process in Laos substantially differs from the Philippine process to better conform to the Lao situation. Recent research and development has further contributed to improvements in the process⁴. The strength of IRAP is that with minor modifications it easily can be adopted to the existing planning environment in most Asian countries. Therefore this issue paper, describing the process as it was developed in the Lao context, might have wider relevance and use.

The issue-paper on “Guidelines on Integrated Rural Accessibility Planning” is the second one in a series of six. The IRAP project intends to produce 6 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 \(draft\)](#)

¹ Various research studies in Africa and Asia plus the Makete Rural Transport Programme in Tanzania as the main operational programme on rural transport

² Aurora Province and the Cordillera Region

³ Guidelines on Integrated Rural Accessibility Planning – Geoff Edmonds, Chris Donnges and Nori Palarca (Manila 1994)
ILO

⁴ At the time of this print the Lao project is still ongoing and further developing and fine-tuning the methodologies. These guidelines are a first version and it is expected that regular updates will be produced if major developments take place.

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4. The Accessibility Data Base (draft)
5. IRAP Prioritization Techniques and Procedures (draft)
6. IRAP at the Village Level (draft)

The issue papers are meant to stimulate and guide discussions to improve the IRAP planning procedures in Laos and other countries where activities are starting such as Indonesia, Cambodia and Mongolia. 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.Introduction

From IRTP to IRAP

Research work on rural transport, initiated by the ILO in the early 80s, was brought together in a book “Rural Transport in Developing Countries” published in 1985. This book was important in that it marked a new approach towards rural transport in general and induced a rural transport planning discipline⁵.

Initially the objective of IRTP was to identify transport patterns of rural households and identify their transport needs. The key features of IRTP are:

- ☞ *the starting point of rural transport planning should be the real transport needs of the rural people;*
- ☞ *in identifying interventions to improve rural transport one should consider the following options:*
 - *the development of the road network;*
 - *improvement of the village level transport network including paths, tracks and footbridges;*
 - *development of transport services*
 - *increased use of IMT*

The concept of IRAP has evolved from IRTP. IRAP developed into a set of planning procedures that look at access, transport and mobility from a broader perspective. IRAP has become a tool for rural infrastructure planning that is used by local Governments and development organizations alike. It promotes community participation and the optimum use of local resources including labour.

Rural Transport, Accessibility and Development

Rural Transport

The role of transport is to **facilitate** the access people have to goods, services and information. Improved transport reduces isolation. People need to have access to a wide variety of goods, services and information in order to live an economic and social productive life. Transport is basically

⁵ Rural Transport in Developing Countries – Ian Barwell, Edmonds, G.A., Howe, J.D.G.F. and de Veen J. (London 1985) Intermediate Technology Publications

concerned with improving the **mobility** of the individuals and the goods and services they need. Improved transport results in faster, safer, cheaper, more reliable and more comfortable (less spoilage) travel of people and products. This is conventionally done by the construction of road infrastructure, anticipating a response by the market (private or state) to use the road⁶.

The ILO defines transport as “*the movement of people and goods by any conceivable means, for any conceivable purpose*”⁷. Transport patterns in developing countries and developed countries, in urban areas and rural areas differ substantially. Research work in several African and Asian countries revealed that **rural transport in developing countries** has its own very **distinct features**. It is characterized by people moving around in rural areas for a variety of subsistence, social and economic purposes. Much of the transport takes place on foot and much of it is in and around the community away from the road network. If transport is the means to improve mobility of the people to gain access to the services and facilities they need, then planning for rural transport should not overlook the option of non-road interventions such as IMT, transport services and village infrastructure (paths, tracks, trails, footbridges etc) to improve mobility and hence access.

The objectives of rural transport planning therefore should be to, in a cost-effective manner, improve the access to the goods and services that rural communities need for their social and economic development. Improvements include all interventions that effectively enhance mobility of rural dwellers from rural roads to intermediate means of transport (IMT).

Accessibility

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.

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.

⁶ Guidelines Rural Transport Planning – David Tighe, Tom Strandberg (Geneva 1994) ILO

⁷ Accessibility Planning and Local Development – Kanyama Dixon Fyle (Geneva 1998) ILO – Rural Accessibility Technical Papers No. 2

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**”. Access and transport obviously are closely related.

Obviously, improving transport to enhance mobility 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 access*⁸”

Development

A lack of access is a major contributing factor to poverty. It is however only one of the constraints to poverty alleviation. It is a difficult task to single out “access” and to point out to what extent it constrains development. A lack of access however generally means isolation. Isolation often induces poverty. Research has shown that a causal relationship exists between access and poverty. A study in the Philippines which compares accessibility with levels of poverty reveals that “*it does seem clear that some basic relationship does exist between the level of access and the income levels. This is shown by the analysis of the 9 provinces and supported by the more qualitative assessment of the coastal, lowland and upland barangays⁹ in 6 of the provinces*¹⁰”

Box 1: Access and Poverty Alleviation

The importance of access in economic development is further illustrated by the following authors: “*Isolation is a major constraint to development. Isolation sustains poverty, because services do not reach those that are isolated keeping them illiterate and out of contact of income-generating activities. Accessibility can be seen as the contrary to isolation, is defined by Jones (1981) as the opportunity that an individual at a given location possesses to take part in a particular activity or set of activities*¹¹” and “*Access therefore seems to be a factor in the level of poverty. In the first place it is related at the most basic level of living. If there is no access to health services then people will remain unhealthy, children will die and any epidemic will have catastrophic results. If there is no access to basic information the household will be unaware of technology and information that could assist them in their daily lives. If access to education is limited then succeeding generations will remain at the same level of lack of knowledge*”. The author goes on to say that “*Access is also related to poverty at a different level. Even if access to the basic needs of life are assured, people need to become part of the economy if they are to develop. If there is no access to markets, farmers cannot sell their surplus crops.*”

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

⁹ villages

¹⁰ Rural Accessibility and Income Levels: An Assessment of the Relationship – ILO/DILG Philippines (Manila 1994)

¹¹ Guidelines Rural Transport Planning – David Tighe, Tom Strandberg (Geneva 1994) ILO

If they do not have access to information, they cannot learn of ways of improving either their skills or their productivity¹²

¹² Wasted Time: The Price of Poor Access – Geoff Edmonds (Geneva 1998) ILO – Rural Accessibility Technical Papers No. 3

2. Integrated Rural Accessibility Planning Outputs

The outputs of the IRAP application generally facilitate the work of district and provincial planners, local decision makers and donors alike. Outputs of an IRAP application include:

Improved Capacity at the Local Level

In the first instance IRAP provides the basis for developing capacity of local Government or project staff in relation to planning. It demonstrates the importance of planning systems and planning tools and trains counterpart staff in various planning tasks. This has a broader impact than on accessibility planning alone.

Detailed Data Base on Accessibility

IRAP provides a comprehensive data base of selected areas. This data base provides inputs for higher level administration plans and the preparation of specific proposals for donor or NGO-funded projects. It informs the user on socio-economic and access characteristics of selected areas.

Maps

The maps produced under an IRAP application serve two purposes: to display data for planning purposes and to visualize information for presentations. Maps illustrate access levels and hence visualize the demand for transport and show the supply of services including the transport system.

☞ **Lists of Priority Villages**

IRAP produces lists of prioritized villages by sector. Top priority villages are, based on IRAP criteria, villages that have the poorest access to certain facilities and services and are in dire need for assistance.

☞ **Action Plans and Project Proposals**

An output of the IRAP application are the project proposals and action plans. These plans and proposals comprise sector specific interventions or integrated packages including transport and non-transport interventions all aiming at improving rural access.

3. Integrated Rural Accessibility Planning

Key Features

The objective of Integrated Rural Accessibility Planning (IRAP) is to, in a cost-effective manner, **improve access to goods and services** that rural communities need for their social and economic development. IRAP introduces a set of planning procedures which are based on the access needs of the rural population and seek to maximize the use of local resources.

The essence of the IRAP process is to introduce an **area approach** towards improving rural accessibility. IRAP identifies specific rural access needs and seeks to address access problems through an integrated approach. It enhances participation and promotes an efficient “**bottom-up**” **process for planning** of rural access in general and rural infrastructure in particular.

The IRAP process endeavors to address three questions related to rural accessibility, transport and infrastructure:



1. it defines the priorities for different sector activities to improve accessibility of rural households ⇒ **what should be done ?** (improved road access, improved access to primary education, improved market access etc.);
2. it defines the priority locations for particular project interventions ⇒ **where should it be done ?** (in village A or village C or between village D and E, etc.);

3. it defines the most effective design for project interventions to ensure community participation and an effective use of local resources ⇒ **how should it be done ?** (using labour-based procedures or more equipment based procedures; to what extent can the communities implement and supervise implementation, etc.).

IRAP, in short, is a local level, needs-based, area-development, planning tool. Its main features are its **simplicity, user-friendliness, low-cost application** and **immediate outputs**.

Some of its other distinct features include:

The planning procedures are **multi-sectoral** and involve various sectors simultaneously (transport, agriculture, health, education, water etc.) and stimulate a more integrated rural development through the proper planning of infrastructure that cuts across different sectors such as the rural roads.

IRAP is **integrated** in that it considers all aspects of household access needs (subsistence, social and economic) and in that it considers different strategies for reducing the problem.

Water supplies, irrigation, rural roads and social infrastructure are usually planned in isolation from each other. This does not present any problems in relation to major infrastructure programs. Turning to rural infrastructure this approach is not appropriate. It requires a more integrated approach since, especially at the local level, there is often a close interdependence among different types of rural infrastructure.

IRAP enables **local people to more actively participate in the process of planning**. It is imperative for **sustainability** of access interventions that attention is given to all stakeholders from the administration at the district or provincial level to the beneficiaries in the communities. IRAP seeks to involve all stakeholders in its process. *“Ordinary people need to have a say in where a new health center should best be located and what type of service they want it to provide¹³”*.

In addition it encourages to **involve those who benefit in the design and implementation** of local infrastructure. This often reduces the cost of interventions through cash or in-kind contributions from beneficiaries and, again, increases the impact through increased sustainability.

Improved transport is only one of the means by which access can be improved. The alternative is to **improve the distribution of facilities and services** which reduces the demand for transport. IRAP has adopted a dual strategy to address the problem of poor access. Either bringing people more easily to the services and destinations they need to reach (i.e. improving the mobility of people) or bringing services and supplies closer to the people (i.e. reducing the need for transport).

Box 2: A Third Strategy

The strategies will differ per country and per geographical area. In Laos, for example, the Government in fact has suggested a third strategy, which is the relocation of communities from the isolated uplands to the lowlands at locations close to the road network.

IRAP consists of planning procedures that are **simple** to use and that are **not expensive** to apply and identifies interventions that respond to people's needs. IRAP however **is not a planning system** as

¹³ Wasted Time: The Price of Poor Access – Geoff Edmonds (Geneva 1998) ILO – Rural Accessibility Technical Papers No. 3

such. It consists of a set of **planning tools** that needs to be integrated into an existing planning process. Existing planning systems in use, no matter how rudimentary they may be, are the most sustainable forms of local level planning: they are being used by the local planners. IRAP seeks to strengthen the existing processes by introducing new techniques and procedures which can be integrated to upgrade specific activities such as data collection techniques, mapping procedures, techniques for priority setting etc..

IRAP is a local level planning tool designed for use at the provincial or district level. Resources at this level are extremely limited and consequently a planning tool to be introduced should not make intensive demand on the financial resources. It should be **inexpensive** in its use. IRAP activities are carried out by provincial and district staff. The cost of carrying out the planning exercise is therefore limited to field allowances and travel cost of counterparts and participants in training courses, the reproduction of instruction materials and various miscellaneous costs.

Box 3: Cost of an IRAP application in a typical province in Lao P.D.R.

In Laos the process is being carried out in 8 provinces and the cost for the capacity building exercise and implementation phase have been established at about USD 150,000 – USD 200,000 per province per 2 years. This amount would be sufficient to:

- survey 125-175 villages
- train 25-30 local counterpart staff in data collection, analysis, priority setting and project proposal writing (3 formal training courses and 2 years on-the-job-training)
- develop a comprehensive data base using Access and Mapinfo software (data base and maps)
- develop an action plan for access improvements

This amount includes the cost of the technical assistance involved. Costs are Lao specific and will vary depending upon a country situation.

4. Integrated Rural Accessibility Planning The Process

The IRAP process is carried out at the village, sub-district (a cluster of villages), district and provincial level. The whole process starts with an initial training course for provincial and district staff on data

collection and accessibility mapping. Figure 1 illustrates the major steps when applying the procedures:

Step 1 involves the collection of access data through rapid rural appraisal and a simple road inventory;

Step 2 includes the development of a data bank;

Step 3 involves the preparation of accessibility profiles;

Step 4 results in a prioritized list which allows the planner to identify where a particular intervention is most needed. The choice can then be made whether access will be improved by locating a service closer to the people or improving the road network;

Step 5 includes the identification of objectives and strategies and the setting of targets;

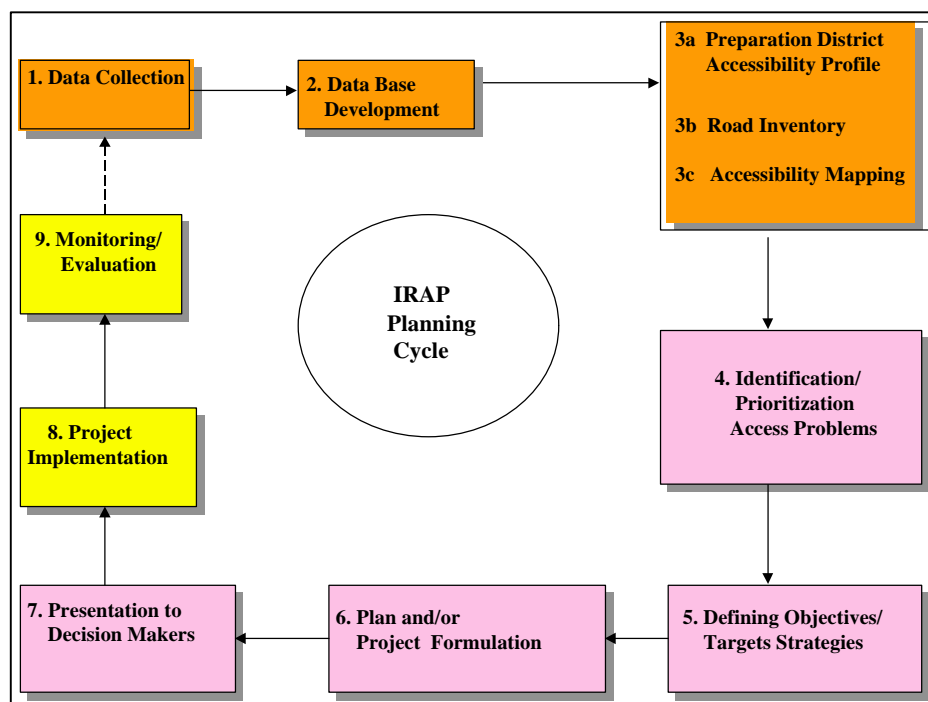
Step 6 involves the formulation of the investment plans as the next logical step in the cycle . These plans lay the foundation for a program of work. Rural access however can only be improved if projects are actually implemented;

In order to actually improve rural access the project also puts forth effort to take the process a stage further by linking the pilot provinces to donors. Step 7 therefore seeks to enhance the communication skills of local staff to present and justify identified priorities to any potential donor: Government, non-government or foreign.

Step 8: involves the actual implementation of projects; and

Step 9: comprises monitoring and evaluation. Once identified projects are being implemented the IRAP project will strengthen the capacity to monitor implementation and assist the authorities in making an assessment of the impact of the interventions.

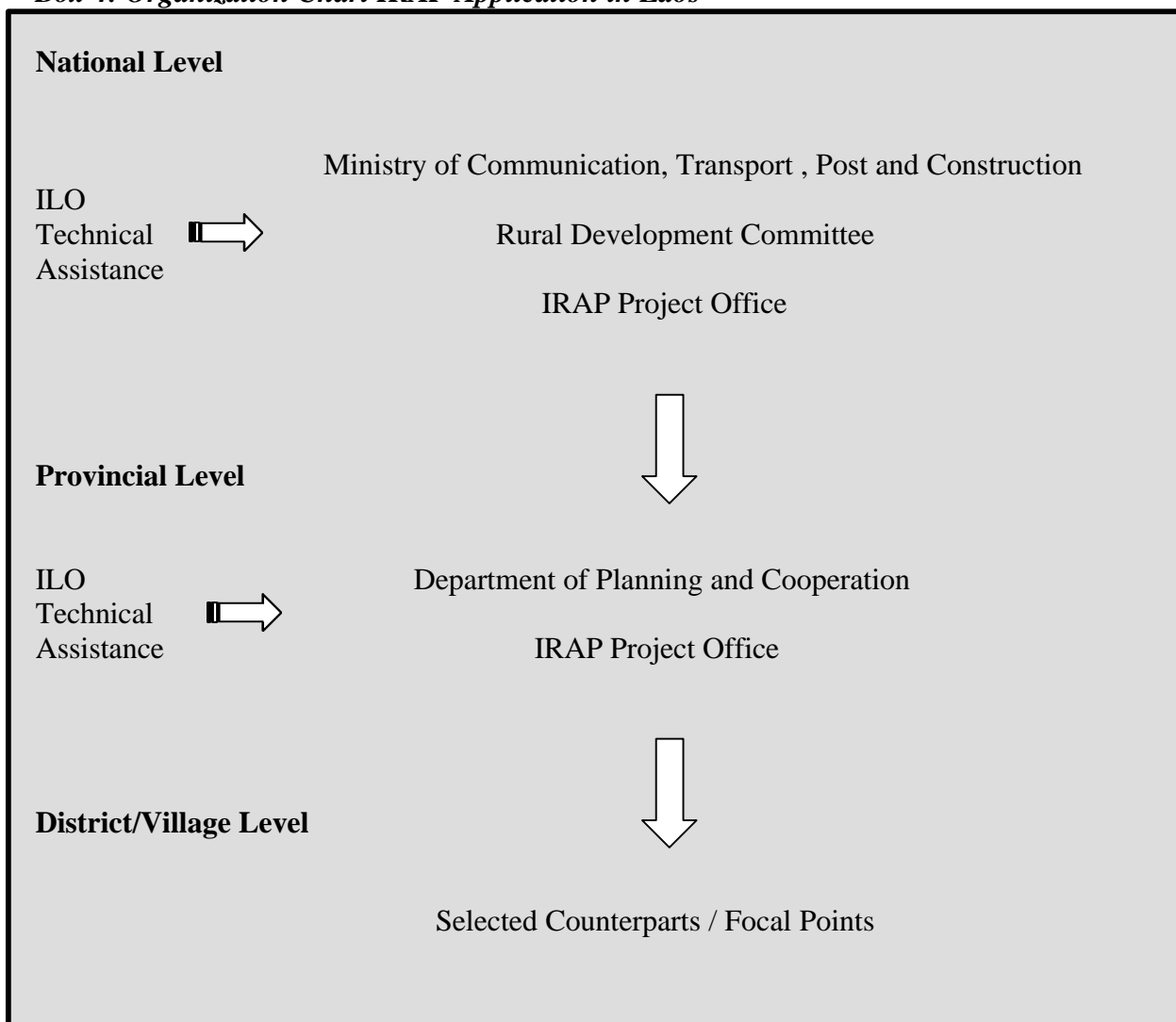
Figure 1: IRAP planning cycle



The management of the IRAP process preferably is the responsibility of local Government, with direct technical and managerial support from a national IRAP unit, in turn, supported by the ILO. The process therefore should respond to the needs of local Governments and should be in line with existing planning procedures to increase its acceptability.

The following box shows the organization chart of the IRAP application in Laos.

Box 4: Organization Chart IRAP Application in Laos



STEP 1: DATA COLLECTION

The data collection phase consists of 4 activities:

- ➔ *3 – 4 days classroom training (T1)*
- ➔ *organisation survey and supervision*
- ➔ *visit villages, conduct interview*
- ➔ *check data, data correction, payment*

T1-Training

The first activity is to organize the so-called “**T-1 Training on Data Collection**”. The objectives of this training course are threefold:

- 1) To explain the concepts underlying the IRAP process
- 2) To introduce and discuss the survey instrument
- 3) To train participants in the relevant skills for data collection

A standard course has been developed and a set of training modules and materials has been prepared for this course¹⁴. The course is organized for people at the district level who will be responsible for **data collection, mapping and the road inventory**. The training course consists of lectures, group discussions, exercises and fieldwork. Lectures are kept to a minimum to allow maximum participation. Most time is devoted to the survey instrument and the techniques to collect **good quality data**. Participants review the survey instrument and go out to do a field test. The results of the field test are discussed in a plenary session at the end of the course.

The entire training takes 3 to 4 days and is conducted by provincial counterparts who have been trained in the IRAP process. It is important that they have access to good audio-visual facilities and have the necessary administrative and logistics support.

Organization Survey and Supervision

IRAP requires **reliable and recent data** collected at the village level. Special forms have been designed to be used by the enumerators¹⁵. Participants trained in the T-1 Training are hired as enumerators. They go out and visit all villages in their area of jurisdiction and consult village officials and key informants. Prior to data collection it is necessary to organize the survey and arrange for supervision. The enumerators have to be assigned to different clusters of villages. Ideally a team of two people visits a village to conduct the key informant interview. However because of budgetary constraints this may have to be reduced to a single person.

¹⁴ See “Training Materials for the T-1 Training on Data Collection – UNDP/ILO/MCTPC Lao P.D.R.” (Vientiane 1996)

¹⁵ See annex 1

Once the villages have been divided over the enumerators it is necessary to decide on an action plan. “When do we start ?” and “when do we intend to complete the survey ?”. It is necessary to arrange for supervision to monitor the implementation of the survey and control the quality of the data collected. Supervisory staff should come from the IRAP counterpart team at the provincial level and should have prior experience in data collection.

It is recommended to inform the villages about the interview and its purpose ahead of the interview so that people can prepare and are indeed available once the actual interview takes place.

Visit Villages and Conduct Interviews

For IRAP purposes it is necessary to gather **primary data at the village level**. The data collection focuses on the rural households and how they relate to the location of goods, services and facilities in an area. This data is collected at the village level through **key informant interviews**. Enumerators will visit the different villages assigned to them and conduct the key informant interview. The actual interview takes approximately 2-3 hours. Enumerators should plan their interviewing schedule carefully and take into consideration travel time to and from the village.

As soon as the enumerators arrive in a village they arrange for the meeting and gather the key informants. Key informants include village leaders and administrators, teachers, health personnel, extension workers and farmer, youth and women representatives. Key informants should be limited to 6 to 8 people. Instructions as to the conduct of the interview are given during the T-1 training.

Box 5: Data Collection in Laos

The entire data collection exercise in a district in Laos, comprising 50-150 villages, does not take more than 2 months.

Check Data, Data Correction and Payment

It is important to gather **good quality data**. Good quality data is defined as being **accurate and recent**. Inaccurate data can mislead planners and propose wrong development options. For this reason, it is essential to check the data together with the enumerators immediately after the survey has been completed. Data gaps are identified and, if possible, corrected on the spot.

Box 6: Data Checking

In Laos, in fact, data is examined at four different times:

- Immediate after the survey when enumerators and project staff meet. Forms are checked and, if possible, errors and gaps are identified and, if possible, corrected on the spot.
- During the computerization process. Data encoders may discover discrepancies or errors. If possible, corrections are made during this process.
- During the ADB Workshop. The ADB is presented to district officials who are instructed on how to use the data base in a one day workshop. During this workshop people may discover inaccuracies and, if possible, try to correct them.
- During the T-2 training. People are analyzing data to identify problems and set

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priorities. During this process people may realize that data is incorrect. If possible, data will be corrected during the workshop.

Supervisory staff comes from the provincial level and has some proficiency in IRAP data collection. They contribute in resolving problems associated with the questionnaire and provide further information on how to complete the forms and, if necessary, correct information.

Upon satisfactory completion of the survey the enumerators will be reimbursed for their expenditures which includes travel and a field allowance. Sometimes it is necessary to pay part in advance to ensure enumerators have available cash prior to the field work. In certain areas the project provides enumerators with basic medicines and plastic covers and bags.

Box 7: Cost of Data Collection in Laos

<p>In Laos the total amount does not exceed an average of US10 per village¹⁶ per interviewer. Enumerators are paid an average daily subsistence allowance of US 4 per village. In addition to this amount they receive US 2 for medicines, clothing etc. Transport costs vary per village and depend on accessibility. On the average however transport costs do not exceed US 4 per village.</p>
<p>The most expensive data collection happened in the province of Sekong where enumerators had to walk for six days to reach the most remote villages and where soldiers had to be hired to provide protection against tigers and other wild animals.</p>

Supervisory staff is encouraged to pay a courtesy call on local executives during their stay in a district to brief them on the status of the IRAP activities and to request them for their cooperation.

¹⁶ In Philippines the project paid an average amount of USD 4 per village per interviewer excluding travel cost (1990-1995). In Laos the project paid an average amount of USD 6 excluding travel cost per village per interviewer (1995-1998).

STEP 2: DATA BASE DEVELOPMENT

The “data base development” phase comprises 4 activities:

- ➔ *Data Encoding (Microsoft Access)*
- ➔ *Prepare Accessibility Data Base (ADB)*
- ➔ *Present ADB at the District Level (ADB Workshop)*
- ➔ *Correct and Finalize ADB*

Data Encoding

The information contained in the IRAP Village Level Survey forms is, upon completion of the survey, transferred to the Accessibility Data Base (ADB). Standard files have been prepared using Microsoft Access software to facilitate data encoding, processing and analysis. It is important that different provinces use the prescribed files for aftertime consistency.

The computerization of the data starts as soon as the data collection exercise for a district has been completed. Data encoders receive basic instructions and are introduced to some rules of data computerization. People, for example, receive instructions not to sit behind their computers for too long a period of time. Data encoding is a tedious affair and is likely to become boring. It is strenuous on the eyes and requires concentration. The likelihood of data entry errors increases if regular breaks are not taken.

The data entry forms are designed to speed up data encoding and minimize mistakes. Provincial staff is trained in the basics of Microsoft Access and the ADB files and take complete responsibility for data encoding. Most data entries are numerical and standard lists of non-numerical responses are included as check-boxes and occasionally updated.

Preparation of the Accessibility Data Base (ADB)

The document that contains all the village level data is called “**the ADB Book**”. Once all the information has been computerized, specially designed data forms will be printed out and draw up the ADB Book. ADB Books are prepared at the district level.

The lay-out of the ADB Book should be as attractive as possible and the user should be able to understand its contents and quickly find the data he needs. The ADB Book is organized by sector and the data is expressed as numerical values or text. The use of codes is limited to avoid complications once using it.

The ADB Book includes the “raw data” by village and a summary of the consolidated data of all villages in the district. The outline of the ADB Book is the following:

1. Cover page with map of district

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2. Summary of consolidated data
3. General characteristics
4. Transport characteristics
5. Water supply characteristics
6. Education characteristics
7. Health care characteristics
8. Income generating activities characteristics
9. Market access
10. Village problems
11. Village priorities

Present ADB at District Level (ADB Training)

Upon completion the ADB Book is presented at district level during the so-called **ADB Training**. Provincial staff visit their district counterparts and conduct a one day training. The participants in this training come from the different district departments and are not necessarily the same people that attended the T-1 Training. The specific objectives of this training are:

- To present the ADB Book and explain its contents to district officials; and
- To validate, correct and/or update the ADB Book.





The ADB Training takes one day.

Correct and Finalize the ADB Book

After corrections have been made the final version of the ADB book is printed in the local language and in English. Various institutions have expressed a keen interest in the ADB Books and dissemination is done through the provincial office. The production of ADB Books is rather costly (they are thick !) and should only be given to people who can really make use of them. A separate document, the accessibility profile (see step 3), is prepared which describes the district and summarizes access conditions. This document is more of a descriptive character and is disseminated on a larger scale.

STEP 3: PREPARATION ACCESSIBILITY PROFILE, ROAD INVENTORY AND MAPPING

This step consists of four activities:

-  *Calculate Indicators*
-  *Prepare District Access Profiles*
-  *Road Inventory*
-  *Prepare District Maps*

Calculation of Indicators

The use of indicators is a common planning tool. **IRAP indicators** are derived at two levels: the village level, where they are used to **identify sector interventions** in relating indicators to standards, averages or targets, and the local Government level where they are used to identify villages that are most disaffected in relation to the required services, goods and facilities. The primary village data (step 1) is translated into a set of indicators which relate to the specific sector under consideration. The following 7 indicators, for example, are determined for the water sector:

- Number of people in the village
- Type of drinking water system in the village
- Average water collection time
- Type of traditional source
- Perceived water quality
- Villager's perceived problems
- Villager's perceived priorities

These indicators are qualitative or quantitative assessments of different circumstances. The indicators used by IRAP Laos are rated from “0” to “4”. “0” means relatively good circumstances and “4” means relatively bad circumstances. A complete set of indicators and their ratings for the water sector could be presented as follows¹⁷:

¹⁷ For a complete overview see “The T-2 Training Materials - (MCTPC/UNDP/ILO Vientiane 1997)”

Table 1: An Example of Water Indicators¹⁸

Village	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5	Indicator 6	Indicator 7
01	3	2	1	2	3	2	0
02	2	2	2	2	1	2	0
03	3	2	2	2	1	4	1
04	3	0	4	4	0	0	0
05	2	0	3	4	3	0	2
06	3	4	1	2	3	4	0
07	3	2	2	2	0	2	0
08	3	4	2	2	4	4	4
09	3	4	1	1	3	4	0
10	3	4	1	2	3	0	4

Table 2 identifies the different classifications and ratings used in the calculation of the indicators used in the example presented above.

Table 2: Rating of Indicators – Water Sector

DRINKING WATER	
Indicator 1: Number of People in the Village	
1	Villages < 150 people
2	150 <= village <= 300
3	300 <= village <= 450
4	Village >= 450
Indicator 2: Type of Drinking Water System in the Village	
0	Only Improved Source of Water
2	Both Traditional and Improved
4	Only Traditional Source of Water
Indicator 3: Average Water Collection Time (Round Trip)	
1	5 Minutes or Less ($X \leq 5$)
2	10 Minutes or Less ($6 < X \leq 10$)
3	20 Minutes or Less ($10 \leq X \leq 20$)
4	More than 20 Minutes ($X > 20$)

¹⁸ See table 2 for details on the rating of the indicators.

Indicator 4: Type of Traditional Source	
1	Spring
2	Shallow Dug Well
3	Rainwater
4	Stream, Lake
Indicator 5: Perceived Water Quality (Dry and Wet Season)	
0	Good Quality in Both Seasons
1	Good in Dry Season but Not Good in Wet Season
3	Good in Wet Season but Not Good in Dry Season
4	Not Good in Both Seasons
Indicator 6: Villager's Perceived Problems	
0	No Problem
2	Minor Problem
4	Big Problem
Indicator 7: Villager's Perceived Priorities	
0	Not a Priority Project
1	Third Priority
2	Second Priority
4	First Priority

Preparation Accessibility Profile

After processing the indicators a **District Accessibility Profile (DAP)** is being prepared. The DAP provides a written summary and a numerical assessment of access conditions in the district area. The DAP, together with the indicators, reflects levels of access in the individual sub-districts and the district as a whole. The DAP is a **summary document** which provides the reader a **quick overview** of the access situation in a particular district. The DAP is widely disseminated. An example of the transport chapter of the DAP for Nonghet District in Xiengkhouang Province in Laos is given below:

ACCESS TO THE TRANSPORT SYSTEM¹⁹

One of the principal factors affecting the daily lives of the rural population in the Lao P.D.R. is their isolation and the limited access they have to basic, social and economic goods and services. As a result of the often mountainous terrain, the low population density and large distances between the villages, access is often poor.

¹⁹ "District Accessibility Profile _ Nonghet District, Xiengkhouang Province – IRAP Xiengkhouang"

Improving access is a major determinant for sustainable human and economic development in the province and roads are, correctly, seen as a means to facilitate rural development; new roads will improve transport; improved transport will solve access problems.

The improvement of the rural road network however does not, of itself, improve access. Improved access is dependent on the extent to which rural road improvements result in transport services becoming cheaper, faster, more frequent, more reliable and safer; the use of the improved network by more vehicles and traders and government extension workers coming to the villages.

Nonghet District's road network is limited. Only 23% of the villages have all year round road access. The majority of the villages (64%) have no road access at all. 13% of the villages have road access during the dry season only.

River transport is not an important alternative means of transport in Nonghet District: Only 1 village is accessible by river throughout the year and 1 village during the rainy season only. Most villages (98%) have no river access however and fully depend on the road network.

Table 18 shows different characteristics for different zones.

Table 18: Transport Characteristics by Zone

Sub-district (zone)	Number of Villages	Percentage of Villages With All Year Road Access	Percentage of Villages with Dry Season Only Road Access (including villages with all year access)	Percentage of Villages with All Year River Access	Percentage of Villages with Wet Season River Access (including villages with all year access)	Percentage of Villages Without Any Road or River Access
Prefecture	10	90%	90%	0%	0%	10%
Sandone	10	50%	60%	0%	0%	40%
Phavaen	18	22%	27%	0%	0%	72%
Thamtao	14	0%	29%	0%	0%	71%
Phakboune	15	33%	47%	0%	0%	53%
Phabong	15	20%	67%	0%	0%	33%
Keohone	5	0%	0%	0%	20%	80%
Chang-Houaykham	5	0%	0%	20%	20%	80%
Borkor-Borgnia	23	0%	0%	0%	0%	100%
District	115	23%	36%	1%	2%	63%

The total length of the road network in Nonghet District is 147 kilometers.

Table 19: Road Network Characteristics

Classification	Total Length		All year Round		Dry season Only	
	<i>km</i>	<i>%</i>	<i>km</i>	<i>%</i>	<i>km</i>	<i>%</i>
National Road	69	47%	69	100%	0	0%
Provincial Road	0	0%	0	0%	0	0%
Rural Road	78	53%	18	23%	60	77%
Total	147	100%	87	59%	60	41%

The road/population density is 0.0042 (4.2 meters of road per person).

The road/land area density is 0.065 (65 meters of road per square kilometer of land).

At the end of the village interview key informants were asked to assess access problems by sector and identify priority sectors for projects. Tables 20 and 21 present the results for Nonghet district.

Table 20: Village Access Problems as Perceived by the Key Informants

<i>Percentage of Villages Having Identified Access to the Road Network as:</i>		
A Very Big Problem	A Minor Problem	No Problem
63%	9%	29%

Table 21: Village Access Priorities as Perceived by the Key Informants

<i>Percentage of Villages Having Identified Access to the Road Network as:</i>			
A First Priority for Improvement	A Second Priority for Improvement	A Third Priority for Improvement	No Priority for Improvement
34%	15%	12%	39%

The main problems identified were no roads (90% of all villages identifying access as a very big problem).

All year round transport services are available in 24% of all villages. The main means of public transport are modified passenger pick-ups and trucks.

Table 22: Village Access Problems as Perceived by the Key Informants

<i>Percentage of Villages Having Identified Access to Transport Services as:</i>		
A Very Big Problem	A Minor Problem	No Problem
50%	22%	28%

The main problems identified were no vehicles (74% of all villages identifying access as a very big problem).

The most important private means of transport are bicycles (1 for every 2.6 households), motorcycles (1 for every 22 households), non-motorized boats (1 for every 65 households) and trucks (1 for every 236 households).

Road Inventory

Before analyzing the data and identifying sectoral priorities (step 4) it is necessary to survey the existing rural road network. Where are the roads, in what condition are they and who are using them ? For obtaining this data it is necessary to conduct a **road inventory**.

The aim of the IRAP road inventory is to make an overall assessment of the condition and geographic distribution of the road network in a district. The IRAP road inventory does not provide any technical information on the specific condition of each road link or provide data on the cost of maintaining or improving existing links. It is a first inventory to **generate a picture on the overall status** of the (rural) road network. The road inventory together with the village data can be used to prioritize individual road links (step 4). A follow-up survey is necessary to provide the specific data on the selected road links.

The IRAP road inventory is based on one form to record data for the individual road links. Provincial staff is trained on-the-job to fill out the forms. The data is computerized using Autocad and Microsoft Access Software. In addition the provincial teams produce **road key maps** displaying the road network in a district, the quality of the roads and the villages with or without road and/or river access.

Accessibility Mapping

Accessibility mapping is an integral part of the IRAP procedure. It allows the planner to **visualize** the location of things within a given area and 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 accessibility mapping is to provide a **picture of access conditions** in a given area; to help in the **identification** of access problems and in the **formulation** of interventions; to enhance the **communication** of information and recommendations to an audience; and to **evaluate** the impact of access improvement projects.

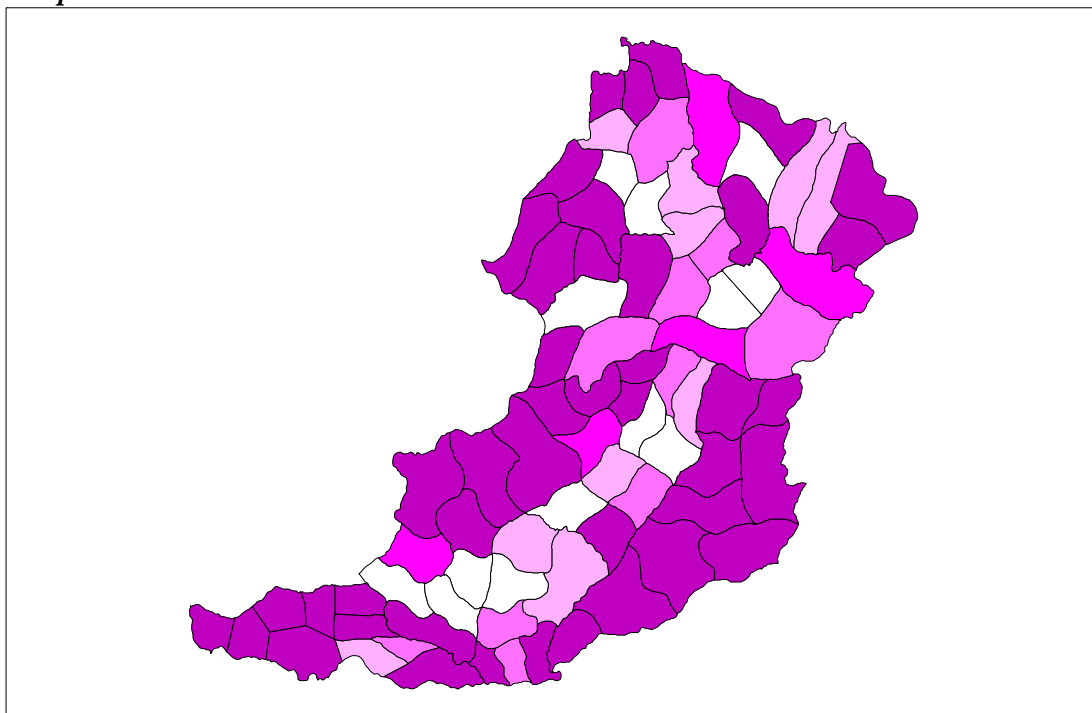
Accessibility mapping has been developed as a “user-friendly” process that can be easily understood even by people without the necessary technical training. The maps are produced using inexpensive materials that are locally available. The cost of a colored, manual prepared, accessibility map would be

in the order of 10 US Dollar. The average size of a map is about 150 X 150 cm and is prepared in 1 to 2 days time.

Maps are used in presentations to communicate with the audience. Maps are a very effective tool in sending a message. Colorful, large size maps, immediately attract the attention of the audience while visualizing access conditions and access priorities in a given area. Maps also facilitate discussions and reactions from the audience since one discusses issues on common grounds. This has proven to be effective during **resource mobilization** meetings with line ministries and donor organizations meetings.

The following map, for example, summarizes the water supply situation in different zones in a Lao province. People in darker colored zones have poorer access to water and these zones deserve therefore higher priority. The example is taken from Oudomxai province in Northern Laos. The black lines represent sub-district boundaries. Each sub-district comprises 10-15 villages.

Map 1: Access to Water – Oudomxai Province



Box 8: GIS

Geographic Information System (GIS)

IRAP maps are produced manually. Once the map is finished it is difficult to make changes. Also making copies is laborious since it requires somebody to do the job all over again. IRAP Laos has built the necessary capacity in the provinces it is working to produce, read and use access maps. The project is now moving to the next level where the mapping process will be computerized. A simple GIS software package, mapinfo, is introduced at provincial level to produce digitized maps showing boundaries, villages and infrastructure and thematic maps showing different levels of access. At the time of this writing the project is in the process of developing a standard procedure and training materials. Initially GIS will be used to store and display data. In a second phase capacity will be build to use the program for data analysis and priority identification.

STEP 4 IDENTIFICATION AND PRIORITIZATION OF ACCESS PROBLEMS

This step comprises three activities:

- ➔ *4-5 Day Workshop on Data Analysis (T2)*
- ➔ *Presentation of Priorities (Open Forum)*
- ➔ *Prepare Priority Reports*

T2 Training on Data Analysis and Prioritization

The T-2 Training is the second classroom type of training. The objectives of this training are threefold:

- 1) To validate, correct and/or update the information base;
- 2) To analyze the primary data collected in the villages and to calculate indicators;
- 3) To train participants in the use of IRAP planning tools to identify village priorities;

Like the T-1 Training, a standard course has been developed and a set of training modules and materials has been prepared for this course²⁰. The course is organized for key people at the district level, including Governors and Deputy Governors and Department Directors and Deputy Directors, who will be responsible for sector programs. The training consists of group discussions, group work and presentations. Lectures are kept to an absolute minimum to allow maximum participation by the district representatives. Most time is devoted to the calculation of indicators, identification of priorities and preparation of priority maps.

The entire training takes 4 to 5 days and is conducted by provincial counterparts who have been trained in the IRAP process. It is important that they have access to good audio-visual facilities and have the necessary administrative and logistics support. The T-2 training is one of the most important steps in the entire process. It is at this point that data is used to set sector and geographical priorities. IRAP introduces here one of its most innovative and powerful tools: the prioritization process.^{21 22}

Key indicators are used as a means to identify villages or clusters of villages where access is poor. For example, to determine levels of access to primary health care the following indicators are calculated (see also the water example under step 3):

²⁰ See “Training Materials for the T-2 Training on Data Analysis – UNDP/ILO/MCTPC Lao P.D.R.(1997)”

²¹ In fact, different IRAP projects use different procedures for prioritization. The project in Malawi has been using a so-called AAAAS-test to test and select interventions using Availability, Affordability, Appropriateness, Acceptability and Sustainability criteria. The projects in the Philippines and Indonesia are working with Accessibility Indicators expressed as a simple function of people affected by the inaccessibility of certain facilities and services and the average travel times to reach these facilities and services. The processes and procedures are well described in various technical working papers published by ILO. For a detailed list of technical working papers please contact: Development Policies Department (POL/DEV), ILO Geneva.

²² The project in Laos is using modified procedures for prioritization which take account of more factors than people affected and travel times alone.

Table 3: Rating of Indicators – Health Care Sector

HEALTH	
Indicator 1: Health Facility in the Village	
0	Health Facility in the Village
4	No Health Facility in the Village
Indicator 2: Access to Pharmacy/Dispensary	
1	Less than 45 Minutes ($X < 45$)
2	Less than 120 Minutes ($45 \leq X \leq 120$)
3	Less than 300 Minutes ($120 < X \leq 300$)
4	More than 300 Minutes ($X > 300$)
Indicator 3: Access to Clinic/Hospital	
1	Less than 2 hours ($X < 120$)
2	Less than 5 hours ($120 \leq X \leq 300$)
3	Less than 8 hours ($300 < X \leq 480$)
4	More than 8 hours ($X > 480$)
Indicator 4: Government Health Staff in Village	
0	Staff in Village
4	No Staff in Village
Indicator 5: Health Volunteer in Village	
1	Health Volunteer(s) in Village
4	No Health Volunteer in Village
Indicator 6: Total Visits Health Workers	
1	More Than 5 Visits ($X > 5$)
2	Between 3 and 5 Visits ($3 \leq X \leq 5$)
3	One or Two Visits
4	None

Indicator 7: Availability of Medicines	
0	Medicines Available in Village (For Sale)
4	No Medicines Available in Village (For Sale)
Indicator 8: Villager's Perceived Problems	
0	No Problem
2	Minor Problem
4	Big Problem
Indicator 9: Villager's Perceived Priorities	
0	Not a Priority Project
1	Third Priority
2	Second Priority
4	First Priority

Participants are instructed that not all indicators are equally important. Some indicators may be more important than others. Different indicators should therefore have different **weights**. Participants in the T-2 Training, as a group, therefore decide on the different weights of the indicators. Individual participants first assign different weights to the different indicators based on their own preferences and perceived importance and afterwards a group average is calculated. Once the indicators and their weights are known participants calculate the score for each village. The following formula is used hereby:

$$\sum_{I=1}^9 \text{Indicator Weight} * \text{Indicator Rating} = \text{Village Score}$$

A higher village score indicates a higher priority to do something; in this case to identify an intervention to improve the primary health care delivery system.

Access to water supplies, primary schools, markets and roads is assessed by a similar procedure. For income generating facilities the situation is more complex²³

The main output of the T-2 Training is a list of village priorities by sector and district maps identifying priorities.

Presentation of Priorities

The final activity of the T-2 training, and probably the most important one, is the presentation. T2 participants present their findings to an audience consisting of local decision makers and donor representatives. The objective of the presentation is to inform the audience about the findings and recommendations of the IRAP application in a particular district and to solicit further support for improving accessibility.

²³ See "Access and Income Generating Activities; Issue paper 1 – Chris Donnges (Vientiane 1998)"

Box 9: Presentations

Experiences have shown that the presentation is an extremely effective tool to solicit support for the identified priorities. First it provides a mechanism whereby the participants have to “organize and present” the materials (statistics, priorities and maps) they have produced and second because it allows the participants to “communicate” to a public. It is therefore of the utmost importance that the presentation is well prepared. Participants prepare their own script, develop materials for the presentation, do a dry run and finally present to the audience.

Prepare Priority Report

After completing the T-2 training the provincial teams prepare a T-2 training report which summarizes the prioritization procedures used, lists the village priorities by sector and identifies the training participants. This report is important in that it **confirms** the priorities identified during the training and is distributed to institutions involved in improving rural accessibility. It also provide a tool to **evaluate** the success of the program, in terms of priority projects implemented, later on.

STEP 5 DEFINE OBJECTIVES, STRATEGIES AND SET TARGETS

This step includes two activities:

- ➔ *Define Objectives*
- ➔ *Set Targets, Identify Strategies*

Define Objectives

With this activity we progress from the **situational analysis** in the definition of general **objectives or goals**. It covers the heart of the planning process: the identification of objectives, the setting of specific targets, the formulation of strategies to achieve the targets and the identification of a range of projects to implement the strategies (step 6). The planner's particular role during this phase is to review the analyzed data, the accessibility profile, and suggest **general directions** (objectives) to improve accessibility. IRAP objectives are rather abstract, they generally specify a desirable state that a district or zone wishes to achieve such as health for all, improving the water supply for the rural population or improving the rural road network. Priorities determine which objectives are more important than others. Targets are more specific and include somewhat narrower statements about what should be done to achieve the objectives.

Box 10: Examples of Objectives

Examples of objectives are:

1. Improve the rural health situation by improving the rural water supply in villages that presently have poor access to water.
2. Improve the rural road network in order that travel time to the market is reduced and villages can be more easily reached by Government health workers in areas with poor market access.

Defining objectives can be a difficult process, but it is an important one. At the end or after the T-2 Training, after the data has been analyzed and summarized in indicators, district officials should sit together and define and prioritize their objectives based on the indicators available and related to planning standards, norms or national and provincial averages.

Target Setting and Defining Strategies

Before preparing action plans or project proposals it is necessary to set targets and develop strategies to meet these targets. Targets need to be **realistic** and **achievable**. Realistic and achievable targets are targets that can be met in a certain time period subject to local resources and capacity. It has no use to define over ambitious targets since this will only erode the credibility of the IRAP procedure. Targets should also be **measurable** in order to monitor progress (see step 9).

Targets set out by sector what one seeks to achieve in a certain time period. The following example is taken from Khammouane province. The access indicators are derived from the IRAP survey:





Table 4 : Examples of Access Indicators and Targets (Mahaxay District – Khammouane)

<i>Sector</i>	<i>Access Indicators (April 1998)</i>	<i>Targets (December 2000)</i>	<i>Strategy (Before the End of 2000)</i>
<i>Water</i>	<i>One point source for every 242 households</i>	<i>One point source for every 100 households</i>	<i>Provide improved water supplies in 27 additional villages</i>
<i>Education</i>	<i>65% of the villages has an elementary school</i>	<i>90% of the villages has an elementary school</i>	<i>Build 21 elementary schools and assign teachers</i>
<i>Health</i>	<i>Average travel time to the pharmacy is 3 hours and 30 minutes</i>	<i>Reduce average travel time to pharmacy by 50%</i>	<i>Construct 2 more dispensaries, set-up village medicine banks and improve 2 rural roads</i>
<i>Rural Roads</i>	<i>16% of villages has all year round road access</i>	<i>50% of villages has all year round road access</i>	<i>Improve 6 rural roads to all-year standards (including the 2 roads as part of the health care improvement strategy)</i>
<i>Markets</i>	<i>Average travel time to the main market is 5 hours and 30 minutes</i>	<i>Reduce average travel time to market with 25%</i>	<i>Construct one alternative public market and improve 4 rural roads</i>

Strategies are defined to reach the targets. They spell out **what needs to be done** in a certain area in order to meet the targets. Obviously there is a need for site selection since not all access problems can simultaneously be solved. The indicators calculated under step 4 of the IRAP application can further be used to identify priority locations. Strategies are implemented through activities called “projects”.

STEP 6: PLAN AND/OR PROJECT FORMULATION

This step includes four activities:

-  *4-5 Day Classroom Training (T3)*
-  *Prepare Project Proposals*
-  *4-5 Day Classroom Training (T4)*
-  *Prepare Integrated Action Plans*

T-3 Training

A structure and program for the T-3 Training has been prepared which consists of two parts: **problem tree analysis** and **proposal writing**. Problem tree analysis is used as a tool to identify specific interventions to improve accessibility associated with health, education, water, transport and income generating activities in priority villages identified in the T-2 Training. Proposal writing involves the **translation of interventions or projects ideas into concrete project outlines** with a tentative budget.²⁴

The objectives of this training are threefold:

1. To analyze the main access problems by sector and identify objectives and strategies to overcome these problems;
2. To train participants in project proposal writing and calculating project budgets²⁵;
3. To present the proposed priority projects to a wider audience;

The T-3 Training is the third classroom type of training. Like the previous training, a standard course has been developed and a set of training modules and materials has been prepared for this course. The course is organized for key people at the district level, the same people who participated in the T-2 Training, including Governors and Deputy Governors and Department Directors and Deputy Directors, who will be responsible for sector programs. The training consists of lectures, group work and presentations. Lectures are kept to an absolute minimum to allow maximum participation by the district representatives. Most time is devoted to the preparation of problem trees, objective trees and project proposal writing.

The entire training takes 4 to 5 days and is conducted by provincial counterparts who have been trained in the IRAP process. It is important that they have access to good audio-visual facilities and have the necessary administrative and logistics support.

²⁴ See “Training Materials for the T-3 Training on Data Analysis – UNDP/ILO/MCTPC Lao P.D.R. (Vientiane 1997)”

²⁵ The T-3 Training in fact deals with step 5 and 6 in the planning cycle

After being trained, participants are able to identify access problems in villages, develop strategies to overcome these problems and translate these strategies into draft project proposals for local or external assistance.

Preparation of Project Proposals

The T-3 Training is a classroom exercise. Project proposals that result from this training are mere **outlines** and are not yet final. They are based on ideas and data generated during the IRAP application. Participants used cost guidelines established by the IRAP project to estimate the cost of different interventions. These cost estimates do not always reflect the real cost of the projects. The draft proposals need to be finalized in **consultation** with the villagers involved and sector specialists from the different line departments.

Participants trained during the T-3 Training, in concert with the Department involved, will have to take their proposal back to the priority villages and discuss with the local people whether the proposed intervention is **desirable, effective** and **feasible** in solving an access problem. Do the people really want the project identified, are they willing to contribute, does the intervention really solve their access problem or are there better alternatives, do the cost justify the benefits? If the proposal passes the test it is necessary to discuss the mode of implementation and determine responsibilities. What is the project's time-table? Who will undertake what works? Where do the resources come from? Who will be responsible for supervision and management? How will the maintenance be organized? Etc.

Again, the finalization of the project proposal in consultation with the villages requires certain skills. Experience or training in community participation is often necessary to ensure that the consultation process is effective (see also step 8)²⁶. Qualified staff, trained under an IRAP project, are necessary to supervise and guide the finalization of project proposals. Once all parties agree and amendments have been made the proposal is ready to be submitted (see step 7).

T-4 Training

The formulation of an investment plan, an action plan, is the next logical step in the cycle. However the IRAP application could end at the project formulation stage (T-3). The objective of the T-4 Training is to convert the results of the T-2 and T-3 Training into a concrete and realistic plan of work. This activity is optional and not a pre-requisite for improving accessibility.

IRAP Laos has decided to assist local Governments to prepare action plans for so-called focal sites.

Box 11: Focal Site Development in Laos

The Government of Lao P.D.R. has identified "Rural Development" as one of their eight national priority programs. The Government intends to concentrate its efforts in the most under-privileged areas where people live in unacceptable conditions and has adopted a "focal site approach" to rural development. The new Rural Development Program 1998-2002 indeed focuses on promoting a multi-sectoral and integrated approach to rural development which concentrates on these focal sites. The essence of focal sites is to increase food and commodity production, to create employment opportunities, and to improve the living conditions. Based on

²⁶ The IRAP project in Laos in cooperation with ESCAP has developed a community participative process in which the communities are involved in the planning, design and implementation of access interventions. Reports, guidelines and in-house capacity resulting from this exercise could strengthen this undertaking.

certain selection criteria all provinces have identified focal sites and have submitted operational budgets. In addition the Government will seek donor funding to complement its rural development effort.

In this context IRAP has developed a procedure and uses its existing tools to produce action plans for improving access in general and rural infrastructure in particular within these focal sites. Participants in the T-4 Training are guided to provide an action plan for the focal site which describes current levels of accessibility, defines objectives, targets and strategies and identifies and prioritizes different options to improve accessibility. Again, the T-4 Training is a classroom exercise and trainees are taught the basics of providing an action plan. The real work, preparing a final action plan, starts afterwards.

Preparation Integrated Action Plan

It needs to be emphasized that formulating an action plan is not the final step in the planning process. The action plan sets out the projects that need to be implemented and the villages that deserve priority. These project proposals contained in the action plan lay the **foundation for a program of physical works** that will effectively improve rural accessibility. These project proposals need to be discussed with the people involved to find out whether the proposed interventions are **desirable, effective and feasible** (see section on preparation of project proposals).

Preparatory work for the formulation of the action plan will be done during the T-4 training. After training and after the necessary consultation process in the villages the plan needs to be finalized. This should be done in the districts where the zones are located, by district officials, with assistance from the IRAP teams. An action plan basically informs the user “**what should be done to improve rural access, where should it be done and how should it be done**” and should contain:

- An analysis of the access situation in the focal site
- An identification of access problems
- Objectives, target and strategies to improve access
- Priorities
- Options to improve accessibility
- Project proposals including a budget and time schedule

Once the plan is finalized its needs to be presented and discussed with local authorities.

STEP 7: PRESENTATION TO DECISION MAKERS

This step includes two activities:

➔ *Presentations*

➔ *Follow-up*

Presentations

One of the most important activity in the planning cycle is **the presentation to decision makers** including local Government officials, department heads and donor/NGO representatives. Local planners need to **communicate their priorities, proposals and plans** with the people who make decisions about the allocation of resources. An IRAP activity has two objectives: capacity building in planning for improved access and effectively improving accessibility. If all priorities, proposals and plans end up in a drawer, rural accessibility has not effectively been improved. Presentations can be made in an open forum or to individual representatives of selected organizations. The IRAP application in Laos provides the opportunity for local level planners to present their priorities and proposals to a wider audience in an open forum at the end of the T-2 and T-3 Training. The objective of the presentation is to **inform** the audience about the findings and recommendations of the IRAP application and to solicit further support for improving accessibility. Presentation skills of local planners are sharpened in advance during the training. Participants learn how to prepare a script, information materials and visual aids and are trained in basic presentation and communication skills during dry runs.

Box 12: Donor Meetings

In addition to the more general presentations at the end of the T-2 and T-3 Training the IRAP activity in Laos organizes more formal **donor meetings** to which Government Line Ministries and Donor organizations are invited. Again, representatives of provinces and districts are given the opportunity to present the methodology, findings and recommendations.

Follow-up

Experiences have shown that the presentation of recommendations and priority projects by local level planners is an extremely effective tool to spread the IRAP word and solicit support. The approval of project proposals and plans, however, often is a **long process** and needs follow-up. Individual contacts with Government and donor representatives are kept warm to expedite project approval.

The ultimate approval of a project or plan is a decision made by third parties over which the IRAP process has no influence.

STEP 8: IMPLEMENTATION

This step only includes one activity: **implementation**

IRAP is a capacity building process. Implementation of physical works is done by local

governments or line departments. IRAP “does not implement projects” as such, however it could strengthen certain elements of implementation.

Project implementation is left with the institutions that have the expertise and resources to implement physical works. The IRAP planning cycle is a **planning process** which does not include the actual implementation of the works that were identified, prioritized and designed.

IRAP however could support implementing agencies and strengthen several elements of the implementation process, namely:

- & strengthening community participation in the planning, design and implementation of physical works
- & promoting the use of labour-based methods

Community Participation

The IRAP project in Laos promotes community participation at three levels: **problem identification stage, design of project stage and implementation stage**. In cooperation with the Economic and Social Commission for Asia and the Pacific (ESCAP) it has developed new **guidelines on participatory planning of rural infrastructure**. These guidelines were developed and field-tested in one of the project’s pilot provinces. IRAP Laos now introduces and promotes the use of participatory techniques, increasing the active participation of the communities involved, during the project identification, design and implementation phase. These guidelines will be discussed in more detail in a forthcoming issue paper²⁷.

Problem identification

In the standard IRAP process, primary data is gathered at the village level through rapid rural appraisals. At the end of a village interview, villagers are given the opportunity to identify their main (access) problems and prioritize the projects that they perceive as necessary to overcome the obstacles. The whole process of problem identification and project prioritization does not take more than one hour. This method has many disadvantages and should only be seen as a first step in a problem identification process. The main advantage is that it is quick and inexpensive. If one has to cover a large area, for example a district with over a 100 villages, then it is often impossible to use more sophisticated techniques which sometimes require several days in each village.

IRAP was not designed as a community participation process in the first place. It was designed as a tool that will quickly enable local Governments and planners to set priorities based on the real needs of the local people and allocate public funds accordingly. In order to find out about the real needs data is collected, first hand, at the village level. People participate in that they share their information, problems and aspirations.

²⁷ See also “ESCAP/UNDP Guidelines for Participatory Planning of Rural Infrastructure (1998 ESCAP Bangkok)” which were produced by ESCAP as a result of a joint IRAP/ESCAP activity “Participatory Planning of Rural Infrastructure” in Oudomxai Province, Lao P.D.R.

For many donor supported projects this is not sufficient. In order to avoid flawed decision making and reducing a possible bias in project identification at the village level more sophisticated community participation techniques are often required.

Box 13: Community Participation in Planning

With ESCAP^{28 29} support the IRAP process in Laos was taken a step further to serve the needs of an area development project by developing more sophisticated procedures to involve villagers in the identification and prioritization of access interventions. The procedures are based on a methodology, AIC (Appreciation-Influence-Control), developed by the Community Development Department of the Government of Thailand. A disadvantage of the process is that it is time intensive in that it requires 2 full days in each village. A comparison of its results with the standard IRAP process of problem and priority project identification revealed that identified priorities were almost identical³⁰.

The more sophisticated community participation techniques developed as referred to in box 13 have become part of “IRAP’s standard tool kit” in Laos and can be used, upon request by a donor, if the area of concern is limited to a maximum of about 25-30 villages. The advantage is that the use of more sophisticated procedures reduce the likelihood of a bias in decision making. The disadvantages are that the procedures are more resource intensive and create more expectations amongst the villagers. IRAP recommends to use the “more sophisticated procedures” only if funds for effectively carrying out interventions are available.

Design of Projects

Once projects are identified, designs need to be prepared and costs need to be estimated in order to undertake the proposed interventions. Once again, with the cooperation of the local people, these designs need to be finalized and responsibilities need to be identified. Who is responsible for what? When will it be done? Who will supervise the activity? etc.. After the proposals for interventions are agreed on, contracts between the village and the third party should officialize the project and specify different contributions and responsibilities.

Box 13: Community Participation in Design

In Mokwen Zone, Oudomxai Province, the proposal for changing the design of a school building came during a final meeting on contributions and responsibilities. The villagers requested to change the design of a school building from concrete to wood after they understood what it meant to have the responsibility for hauling the materials. Concrete would mean over 800 man-days of carrying sacks of cement from the Mekong river uphill over a distance of 10 kilometers while wood was easily available within the vicinity of the proposed location.

²⁸ See “Pilot Project on Participatory Planning of Rural Infrastructure” UNDP 1996 (Bangkok)

²⁹ See “Reducing Poverty by Improving Accessibility” (ESCAP 1998 Bangkok)

³⁰ See “Report on the Base Line Data” Chris Donnages MCTPC/UNDP/ILO/ESCAP (1997 Vientiane)

Implementation

Involving the villagers in the actual execution of the proposed works not only has an income effect but also leaves behind certain skills that might, in the near future, benefit the community in general and the implemented intervention in particular. (For more details see the section on labour-based methods.)

Box 13: Community Participation in Implementation

A farmer working with the IRAP/ESCAP pilot project in Oudomxai province mentioned after having participated in the construction of a school building in his home village: "... now that I've learned certain skills (carpentry) I can use my experience to renovate my old house ...".

Community participation means different things to different people. The bottom-line is that people will **only value projects that effectively address 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 altogether³¹.

Labour-based Methods

The ILO has a long history in developing and providing technical assistance in the use of labour-based methods. ILO's Employment-Intensive Programme (EIP) was created in the mid 70s and since its inception the program has developed the labour-based technology and has technically assisted country programs in over 35 developing countries. EIP has demonstrated that rural infrastructure can be created and maintained in a **cost-effective way** with labour-based methods³². The main advantages of the use of labour-based methods include:

- employment creation (short-term)
- income generation (multiplier effect)
- save scarce foreign exchange
- increase people's participation and ownership (maintenance)

It is not the intention that IRAP would provide the necessary technical assistance to create capacity for using labour-based methods or to implement physical works. Both labour-based technology and IRAP were developed by ILO and it is obvious that **linkages** exist between the two programs. Being an ILO program, IRAP could **facilitate** exchange of knowledge and expertise between different projects and has direct access to ILO's centers of excellence.

Box 14: IRAP and Labour-based Technology

IRAP is a local level planning process designed to identify projects to improve accessibility based on the real access needs of the rural population. It seeks to optimize the use of local resources. One resource available in most rural areas is the available

³¹ see "Community Participation in Rural Infrastructure Development" by Dee Jupp (1995 Bangladesh)

³² see the various ILO publications on this subject.

time of villagers. In case of underemployment or unemployment local labour might be recruited to assist in the implementation of public works. Using labour-based technologies has two main advantages: it improves accessibility through projects that are likely to be more sustainable and it creates employment and generates income. The link between IRAP, a planning process, and labour-based public works, an implementation process, is obvious.

STEP 9: MONITORING AND EVALUATION

This step includes two activities:

➔ *Monitoring Project Implementation*

➔ *Impact Evaluation*

Monitoring

Monitoring includes **project monitoring** and **program monitoring**. The first is a project management tool and is the responsibility of the implementing agency. The latter is more general and is part of the IRAP planning cycle. The entire purpose of access planning is to produce plans and proposals that can be carried out effectively within the overall aim of improving accessibility in rural areas. IRAP planners are usually not directly involved in the implementation of projects. In fact, their responsibility ends once the proposal or plan has been prepared.. Access improvements, however, need to be documented and progress in improving rural accessibility needs to be reviewed regularly. This is what IRAP refers to as program monitoring.

IRAP is a **dynamic process** and it is recommended to update its information base every two to three years. Updating the data-base and recalculating the access indicators would provide planners with a clear picture of the most recent changes in levels of access. Targets were set during an earlier stage of the planning cycle and could provide a useful tool for monitoring progress in improving accessibility. Table 3 shows an example:

Table 5: Examples of Monitoring Progress

Sector	Access Indicator	1998	2000	Target 2002	Year 2000 Achievement against Targets
Water	Percentage of Villages with Access to Potable Water	20%	30%	75%	18%
Education	Average Travel Time to the Pharmacy	350 minutes	180 minutes	120 minutes	74%
Rural Roads	Villages with All Year Round Road Access	32%	46%	90%	24%

Quantitative indicators and targets are used for monitoring the progress of improving accessibility (see example above). It enables IRAP planners to monitor progress and to assess whether certain targets can be met or not and, if appropriate, take the necessary corrective action.

Evaluation

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Evaluations are intended to find out whether a project has been successful or not, and why. The final step in the planning cycle involves the application of procedures to evaluate **socio-economic and accessibility impacts** of rural access improvement projects³³.

Evaluations are important not only to measure the success or impact of a project but also to guide future investment decisions.

³³ IRAP Laos in cooperation with the ILO Labour-based Project and Sida's Rural Road Project is in the process of developing an impact evaluation procedure that can be used to evaluate impact of rural access projects. The method adopted by IRAP will be divided in:

- ↪ baseline surveys including traffic volume surveys, household surveys and market surveys associated with rural roads, household surveys associated with social infrastructure and household and agriculture surveys associated with irrigation.
- ↪ follow-up surveys on socio-economic effects and access improvements.
- ↪ analysis of impact.

5. IRAP Road Planning Cycle

The road network and in particular the rural road network in Laos has been developing slowly due to the past wars, lack of finance and the country's difficult topography. Most recent efforts to improve the road network in Laos have concentrated on improving the national road network. The Government and the donor community are now shifting their attention from assistance to major highway projects to supporting the development of a rural road network. The demand generated by the communities and provinces for new and improved rural roads is substantial. Resources yet are limited and there is an urgent need to establish sound planning procedures to guide Government agencies and donors in the identification and selection of rural road candidates.

Various agencies, Ministries and donors alike, however are interested in road planning only. To satisfy the demand of these organizations and to provide particular support to the rural road sector, the road planning cycle was singled out and presented as a unique process for rural road planning. In fact this rural road planning process comprises just one of the layers of the overall IRAP planning cycle. Though part of the overall package to improve rural accessibility rural roads are often seen as **the** remedy against slow development. Partly this is correct but planners should always keep in mind that **“roads are not enough”³⁴**.

In short, additional data is collected on each road link (step 1) and combined with the ADB data collected by IRAP. The process of defining priorities for rehabilitation and new construction of rural road links consists of three different steps:

1. Screening (step 3)
2. Socio-Economic Ranking (step 3)
3. Technical Assessment (step 5)

The purpose of screening is to eliminate road links in a network that do not satisfy certain basic criteria. The socio-economic ranking exercise introduces simple cost-benefit ratios to identify priority links that passed the screening test.

One of the most important activities is the selection of rural roads. The cost-benefit ratios introduced are a function of construction or rehabilitation costs, the population served and the estimated socio-economic benefits. Once these variables are known it is possible to calculate the cost/benefit ratios introduced by IRAP. Table 6: shows an example for rural roads in a district in Laos:

³⁴ See “Roads are not Enough – Jonathan Dawson and Ian Barwell (London 1993) Intermediate Technology Publications

Table 6: Prioritization of Rural Roads (Lao example)

Road Link	Costs	Population Served	Benefits	$\frac{\text{Total Costs}}{\text{Population} * \text{Benefits}}$	Initial Priority
	(a)	(b)	(c)	(a/(b*c))	
A-G	90,000	1050	125	0.7	3
B-K	50,000	860	106	0.5	2
L-M	35,000	1800	128	0.2	1
N-T	28,000	450	75	0.8	4

The following table identifies the individual socio-economic impacts which are used to assess the possible overall socio-economic impact of rural roads:

Table 7: Indicators for Assessing Potential Socio-economic Impact of Rural Roads

Rural Roads	
Indicator 1: Agriculture Potential	
1	The Area Around the Road has a Low Agricultural Potential (if the road is improved or constructed the agriculture production and marketing of products will not change much).
3	The Area Around the Road has a Medium Agricultural Potential (if the road is improved or constructed the agriculture production and marketing of products will increase).
5	The Area Around the Road has a High Agricultural Potential (if the road is improved or constructed the agriculture production and marketing of products will increase a lot).
Indicator 2: Other Non-Agriculture Potential	
1	The Area Around the Road has a Low Non-Agricultural Potential (if the road is improved or constructed the non-agriculture production and marketing of products will not change much).
3	The Area Around the Road has a Medium Non-Agricultural Potential (if the road is improved or constructed the non-agriculture production and marketing of products will increase).
5	The Area Around the Road has a High Non-Agricultural Potential (if the road is improved or constructed the non-agriculture production and marketing of products will increase a lot).
Indicator 3: Existing Health Services Used by Population	
1	Health Services are Nearby (nearest hospital is less than 2 hours travel)
3	Health Services are an Average Distance Away (nearest hospital is less than 5 hours travel)
5	Health Services are Far Away (nearest hospital is more than 5 hours travel)

Indicator 4: Primary School Attendance	
1	Most Children in the Area Around the Road Go to School (average more than 2 pupils per household) ³⁵
3	Some Children in the Area Around the Road Do Not Go To School (average between 1 and 2 pupils per household)
5	Many Children in the Area Around the Road Do Not Go to School (average less than 1 child per household)
Indicator 5: Secondary School Attendance	
1	Most Children in the Area Around the Road Go to Secondary School (average more than 7 per village)
3	Some Children in the Area Around the Road Go to Secondary School (average between 2 and 7 per village)
5	Only Very Few Children in the Area Around the Road Go to Secondary School (average less than 2 per village)
Indicator 6: Present Access to the District Center	
1	Good (district center is within an average of 2 hours travel from the villages along the road)
3	Fair (district center is between an average of 2 to 5 hours travel from the villages along the road)
5	Bad (district center, on the average, is more than 5 hours travel away from the villages along the road)
Indicator 7: Present Access to the Markets	
1	Good (main market is within an average of 2 hours travel from the villages along the road)
3	Fair (main market is between an average of 2 to 5 hours travel from the villages along the road)
5	Bad (main market, on the average, is more than 5 hours travel away from the villages along the road)

³⁵ Total Number of Pupils in the Area of Influence / Total Number of Households in the Area of Influence

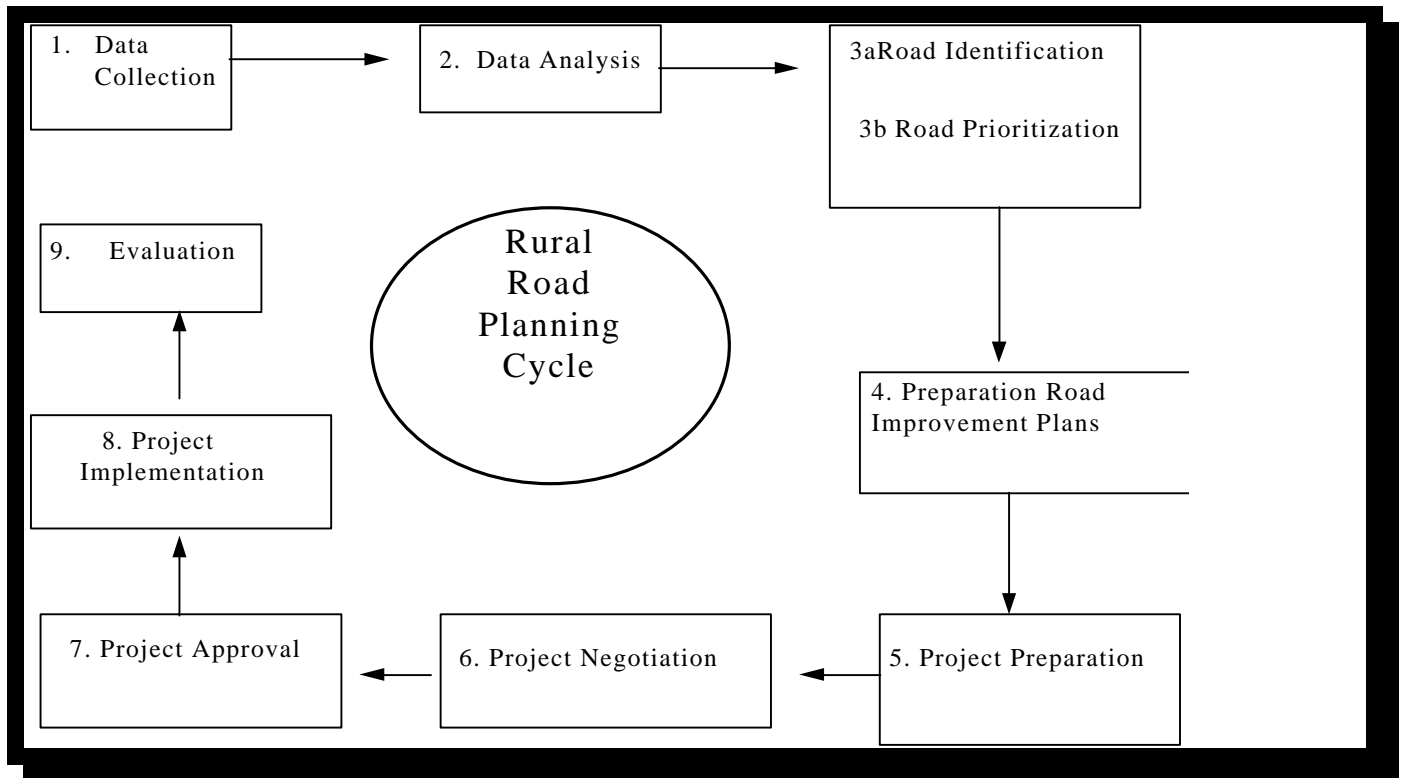
Indicator 8: Water Supply in the Area	
1	Good (most villages have improved water supplies)
3	Fair (only few villages have improved water supplies)
5	Bad (none of the villages has an improved water supply)
Indicator 9: Road Condition before Improvement	
1	Existing Road is in Fair Condition (trafficable during most of the year)
3	Existing Road is in Bad Condition (trafficable less than 6 months per year)
5	No Existing Road or Road is Never Trafficable
Indicator 10: Road Condition as Community Problem	
1	No Problem (most villages identified road access as no problem)
3	Minor Problem (most villages identified road access as a minor problem)
5	Very Big Problem (most villages identified road access as a big problem)
Indicator 11: Road Condition as Community Priority	
1	No Priority (few or none of the villages identify road improvement/construction as a priority)
3	Medium Priority (many villages identify road improvement/construction as a second or third priority)
5	High Priority (many villages identify road improvement/construction as a first priority)

Each of the indicators identified in the table above is rated (scaled) into three levels. The three levels for “Agriculture Potential”, for example, are “high”, “medium” and “low” which receive different scores respectively “5”, “3”, “1”. Each of the indicators will be assigned a different weight and to calculate the number of points (score) per indicator it is necessary to multiply the rating per indicator with the weight of the indicator. The overall indicator for socio-economic benefit is the sum of the points (total score) for all indicators.

Local politicians, planners and other technical experts decide on the different weights themselves. Not all indicators are equally important. Some benefits may be more important than others. Different indicators should therefore have different **weights**. Planners, politicians and other experts, as a group, decide on the different weights of the different indicators. They have hereby a choice of 5 options:

- 5 = Very important benefit
- 4 = Fairly important benefit
- 3 = Medium important benefit
- 2 = Little important benefit
- 1 = Not important benefit

Figure 2: Rural Road Planning Cycle



After the initial prioritization engineers survey the priority roads and assess the technical feasibility of the proposed improvements and come-up with a better cost estimate. Once projects are approved and implemented by the agencies concerned, IRAP could provide assistance in assessing the impact of the roads.

As brought up in the preceding chapter, IRAP Laos is in the process of developing step 9 in the cycle in particular in relation to rural roads. It envisions developing a simple procedure^{36 37} to quickly assess short term and long term impact of rural roads. This procedure can be summarized as follows:

³⁶ See also: A systematic Method to Assess Socio-Economic Impact of Rural Roads – UAG Johanson 1997, ILO Vientiane

³⁷ See also: Preliminary Survey on Rural Road Impact Analysis – L. Mercat 1998, MCTPC/HIFAB Vientiane

Before road construction or rehabilitation starts:

Collect additional data that is not yet available in, for example, the IRAP data base such as traffic counts, household level data and market and product price information.

After road construction or rehabilitation is completed:

Repeat the base-line survey (traffic counts, household data and market and product price information) and collect qualitative data on possible impacts.

Compare base-line and follow-up survey and analyze qualitative data

Prepare a brief impact report 1-2 and 4-5 years after the road project was completed.

6. Conclusions

One should be clear that IRAP is not a comprehensive rural development planning process. It deals with various segments of the rural economy but does not incorporate all rural development elements. Nevertheless it provides a **sound basis for local planning** and acts as a complement to various other rural development initiatives.

Isolation sustains poverty, because services do not reach people, keeping them illiterate and out of contact of income-generating activities. Facilities are often not accessible depriving households from health care, clean water etc.. Improving accessibility provides better opportunities for people to improve their lives. The importance of IRAP as a **poverty alleviation tool** should therefore not be overlooked.

Evaluations of the IRAP application in Philippines and Laos suggest that the procedures are well accepted and appreciated. IRAP is a simple planning tool that **can easily be understood and used by people at the local level** and the IRAP process is seen as a powerful tool for local level access planning. In both countries Philippines and Laos evidence suggests that quite a number of projects identified through the IRAP process have been selected for funding.

Box 15: Strengths of IRAP Method

“The strengths of the method, as expressed by all who are using it, are: a) that it is simple, and cost- and time-efficient; b) that it quickly generates lists of prioritized needs and interventions; and c) that its visual presentation, by means of colored maps of the existing infrastructure and access needs, is easily understood by local-level decision makers (Final Evaluation IRAP Philippines 1997)”

IRAP covers a range of sectors but is not – or not yet – a comprehensive rural development process. IRAP however provides a sound basis for **capacity building** and **local level planning** and could be further developed in a process for more comprehensive rural development planning. IRAP “performs” best in a decentralized context. The IRAP associated support provided to lower levels of Government in terms of technical and management assistance will enhance the local planning and implementation capacity, which, in turn, will improve the overall performance of the public sector.

IRAP **consolidates top-down and bottom-up planning**. Top down planning isolates planners from communities and often results in less effective, non-sustainable, projects. Bottom-up planning serves the immediate community but fails to integrate proposals with those of adjacent communities and not

necessarily reflects national plans, programmes and policies. IRAP puts the two together and provides a framework for realistic planning.

The IRAP process has adopted an integrated approach to planning of rural infrastructure. Interventions are being implemented in the areas of transport, education, health, irrigation, markets and water supply. IRAP offers a potential and a **means for close cooperation** between different departments.

Box 16: IRAP's Potential to Enhance Cooperation

The fact that the teams include staff from each sector and that the teams work together to collect, collate, process and analyse the data and that they all train or are trained together builds a sense of cooperation and collaboration among the team that is rarely found in other projects and programmes. Also, as the training and development programmes have been developed and staged in each province and district to give all a comfortable time frame within which to develop their skills. This also gives the opportunity and scope for an ethos of cooperation and collaboration to develop as an indirect but most valuable effect. It would be difficult to devise a process that would work better or more effectively to develop this degree of cooperation (Evaluation IRAP Laos 1998.)

IRAP provides the potential for rural communities to be actively involved in the planning, design and implementation of rural infrastructure. By promoting community participation techniques during the planning, project design and implementation phases it increases the **appropriateness and sustainability** of the interventions. IRAP procedures respond better to the need of the rural people and use more locally available resources.

IRAP can be used by the administration in the allocation of their own resources and the development of project proposals for external funding. IRAP could also be used by donors and NGOs for the development of special area-based or sector-oriented projects. Staff involved in the preparation of these projects should also be trained in the concepts and procedures of IRAP to provide them with practical planning tools which they can apply to the **preparation of projects and investment programs**. IRAP could also be used to verify existing investment proposals and development plans.

IRAP outputs could be used to **monitor and evaluate** the implementation and impact of specific programs designed to improve rural access. It could also provide a tool to monitor and evaluate changes in access at the different levels of administration.

Once IRAP has produced a, statistically significant, data set it is possible to develop **planning indicators and standards**. Comparisons of area data with planning indicators and standards facilitates provincial planning in that it could become easier to realistically define objectives, targets and strategies.

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ANNEX 1: IRAP SURVEY FORM

This annex presents the English version of the IRAP village level questionnaire in its most complete form. Depending upon the objectives of the survey this form may be modified and “trimmed”.

ANNEX 2: IRAP TRAINING PROGRAMME

This annex summarizes IRAP's formal training programme. It does not include activities such as English training, computer training study-tours and, most important, on-the-job training.

IRAP's formal training Programme

Title of Training	Main Outputs	<u>Participants</u>	Duration	Location
T-1 Training on Data Collection, Road Inventory and Mapping	Participants ready to go to the field to collect village level data, prepare maps and collect road data	Selected enumerators from the districts	3-5 days	District Cent
T-2 Training on Data Analysis and Priority setting	A list of priorities by sector and local staff capable in doing the priority exercise	Senior Government officials at the district level	4-5 days	Provincial C
T-3 Training on Problem Analysis and Project Proposal Writing	Project proposals and local staff capable to identify problems and write project proposals	Senior Government officials at the district level	5 days	Provincial C
T-4 Training on Action Planning	Action plans and local staff capable to prepare draft action plans	Senior Government officials at the district level	5 days	Provincial C

ANNEX 3: IRAP MAP

This annex presents an example of a map manually prepared in a training session..