RATP 15

Guideline

Integrated Rural Accessibility Planning (IRAP) In Mongolia

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SUSTAINABLE LIVELIHOODS PROJECT

International Labour Organization

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Bangkok, International Labour Office, 2006

Integrated Rural Accessibility Planning in Mongolia

Rural Accessibility Technical Paper (RATP) Series No.15

ASIST-AP Rural infrastructure Publication

ISBN: (print)
ISBN: (web pdf) ILO Cataloguing in Publication Data

Acknowledgements

A number of people were involved in the development of the IRAP procedure for Mongolia. First, thanks must be extended to Mr Nori Palarca for both his help in the development of the approach and for conducting the training workshops. In Mongolia the World Bank supported Household Livelihoods Support Programme have taken up IRAP and will implement it through their country-wide sustainable livelihoods project, to this end, the ILO extends it thanks to Mr Enkhbat Mangal from the Local Initiatives Fund who took on the task of becoming the Mongolia IRAP specialist and also Ms Tsetsegbadral Badamdori, Training Coordinator for the Sustainable Livelihoods Project who organised and managed the training sessions.

Finally, ASIST AP is very grateful to Ms Zokhiolt Shurenchimeg, National Project Coordinator, from the ILO's Informal Economy, Poverty and Employment project who, along with Ms Altanchimeg Banzar, Administrative Assistant who both provided much logistical support, help and advice. Thanks also to Mr Chris Donnges from ASIST AP for his help in the development of this work.

IRAP in Mongolia was prepared with technical support from the ILO Regional Programme ASIST AP and the ILO Sub-Regional Programme Informal Economy, Poverty and Employment project both financed by the UK Department for International Development.

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Abbreviations

AD	Accessibility Database
AI	Accessibility Indicator
ASIST-AP	Advisory Support, Information Services and Training - Asia Pacific programme
CSD	Centre for Social Development
GDSI (Ireland)	Galway Development Services International
HH	Households
HLCS	Household Livelihoods Capacity Support
HLCSC	Household Livelihoods Capacity Support Council
HLSPO	Household Livelihoods Support Program
IE	Informal Economy, Poverty and Employment project
ILO	International Labour Organisation
IRAP	Integrated Rural Accessibility Planning
JSDF	Japanese Social Development Fund
LDF	Local Development Fund
LIF	Local Initiatives Fund
SLP	Sustainable Livelihoods Project
NCHLSP	National Committee on Household Livelihoods Support Program
NHLCSP	National Household Livelihood Capacity Support Programme
UB	Ulaanbaatar
UN	United Nations
WB	World Bank

Glossary

Aimag	Province
Soum	Administrative level below aimag
Bagh	Lowest administrative unit below soum
Ger	Traditional Mongolian tent
T1	Technique 1 of IRAP
T2	Technique 2 of IRAP
T3	Technique 3 of IRAP

Introduction

Integrated Rural Accessibility Planning (IRAP) is a local-level planning process for improving access in rural areas through a participatory and bottom-up approach. IRAP provides an objective basis for local development planning and facilitates a needs-based project identification and prioritisation approach to infrastructure investment and development.

As an area based planning tool IRAP focuses on the identification of the real access needs of communities and prioritises interventions and projects on a social and economic basis, planning individual projects that improve the accessibility of rural people.

This publication is the final output of the collaboration between the ILO's Advisory Support, Information Services and Training programme for the Asia Pacific region (ASIST AP) and the Informal Economy, Poverty and Employment project (IE). As part of the IE project a need was identified to develop appropriate participatory local level planning tools to help the soums and baghs identify small scale infrastructure development and improvement projects. The ILO formed a working partnership with the World Bank supported Sustainable Livelihoods Project (SLP) whose implementing office is the Household Livelihoods Support Program (HLSPO) and is run by the National Committee on Household Livelihoods Support Program (NCHLSP) which is lead by the Prime Minister. Under the NHLCSP, the HLSPO is implementing a 12 year Sustainable Livelihoods Support Program. This programme is in the first phase and a component of which is the Local Initiatives Fund (LIF). It is the SLP that will implement IRAP as a means to help soums and baghs identify local development needs that can be funded from the LIF.

Until the collapse of the Soviet Union in the early 1990s, Mongolia operated under a socialist system heavily supported by Soviet Russia. As such, all government functions were centralised with the planned economy run from Ulaanbaatar. When in 1991, Soviet Russia ceased, Mongolia was thrown into a painful and protracted transition period. Previous economic support from Russia stopped and the country suffered. The cancellation of soviet financed assistance, the loss of traditional export markets and the interruption to imports of basic inputs had a severe effect on the country's economy. In short, due to its geographical location and historic dependence on Soviet Russia, Mongolia entered into its transition phase in the early 1990s with little significant infrastructure and with its industrial and agricultural sectors poorly adapted to cope with a market orientated economy. Since the mid-nineties, the country has been embracing market reforms and the beginnings of a decentralised system of planning.

Poverty and Gender in Mongolia

The process of economic transition has resulted in a sharp increase in poverty, a lowering of living standards and a change in the family and social structure of the country.

The loss of previously protected jobs resulted in an increase in poverty; at the same time social services were severally cut, which meant the existing social safety net that had protected Mongolians from poverty disappeared and there remained little to alleviate the effects of the growing unemployment rate. However, in Mongolia the characteristics of poverty are very different to those in other countries with similar income levels. Malnourishment amongst the poorer herding families, for example, is not so prevalent and the unemployed and those working in the informal sector are more highly educated than in other countries. Consequently, understanding the vulnerabilities and risks associated with poverty in Mongolia is very challenging.

Gender disparity, while not on the surface as apparent as it is in other countries, is growing. Recent studies and analysis show that the impact of the economic transition has been very different for women and men. One major change has been the reversal of what was during the socialist times a high level of women in decision making positions. At all levels of decision making, gender equality is not a priority and this deterioration of women's economic and political status is seldom discussed.

For both women and men, the difficult economic conditions are having a real effect on people's ability to find meaningful and gainful employment. As a result, migration has increased (a common response everywhere to poverty), however employment opportunities remain limited.

Planning in Mongolia

Planning in Mongolia is still very sector orientated with little collaboration between the different sectors and ministries. The concept of integrated planning and issues of local level accessibility to social and economic goods, services and facilities is new and something that is beginning to garner real interest.

Under the local Household Livelihoods Support Councils (HLSC) planning offices have been set up to recommend priority investments in such areas as road and bridge construction and the rehabilitation or construction of schools, water

supplies and health centres. At present there is limited capacity for participatory planning and the setting of priorities and no clear guidance on how to undertake it. Under the "Local community mobilisation project" funded by the Japanese Social Development Fund (JSDF), the HLSPO has selected Galway Development Services International (GDSI (Ireland)), in association with the Centre for Social Development (CSD) as a contractor and this association is providing consulting services on "community mobilisation in support of the Local Initiatives Fun".

The Development Action Plan

Currently the Government produces a Development Action Plan. This 4-year national plan focuses on, and aims to, support and develop people's participation[1] in the decision making process particularly when addressing the provision of goods, services and facilities that communities require.

However; because planning is still very top-down, what is contained in these plans is often not original or demand led from the local level. At soum level, for example, plans are often a reflection of the soum governor's campaign pledges which in turn are a reflection of the national priorities set by the Government. Though these plans are established through local level meetings it is acknowledged that at soum and aimag level there is little involvement by civil society into the planning process and that a fostering of local demand is still limited.

Future decentralisation

Aside from the ongoing decentralisation of the planning process, the Government recently set up a taskforce to look at ways to administratively restructure the country. An option being considered is to create 5 development regions that would replace the 21 existing aimags and 9 districts. Within these development regions, 7 new cities/urban centres will be created. It should be noted though that the restructuring is not devolution of power or process per se but a way of developing and establishing coherent regional economic development. At the moment it is not clear when this administrative restructuring will take place but it is hope that it will begin sometime in 2006.

The Sustainable Livelihoods Project's decentralised planning process

As part of the SLPs planning mandate, they have created a series of Household Livelihoods Capacity Support Councils (HLCSC) (Figure 1), which are a local level planning forum set up to help identify local development needs that can be funded by the LIF.

These soum HLCSC consist of the Soum Governor, who is chair, all the Bagh Governors and line agency representation from the following departments: education, health, social welfare, social insurance, agriculture, treasury, finance and industry. There is also a strong civil society presence in these councils.

Plans derived from the soum HLCSC are then forwarded to the Aimag Councils (chaired by the Aimag Governor) and they assess the plans from the soums for funding by the LIF with assistance from the aimag LIF working groups. In order to coordinate and harmonise implementation of the Sustainable Livelihood Project with the aimag development strategies and plan the LIF working groups (which consist of technical specialists and authoritative officers of relevant line ministries and government agencies), aimag HLCSC review subprojects and give advice and undertake monitoring and evaluation on implementation of the projects.

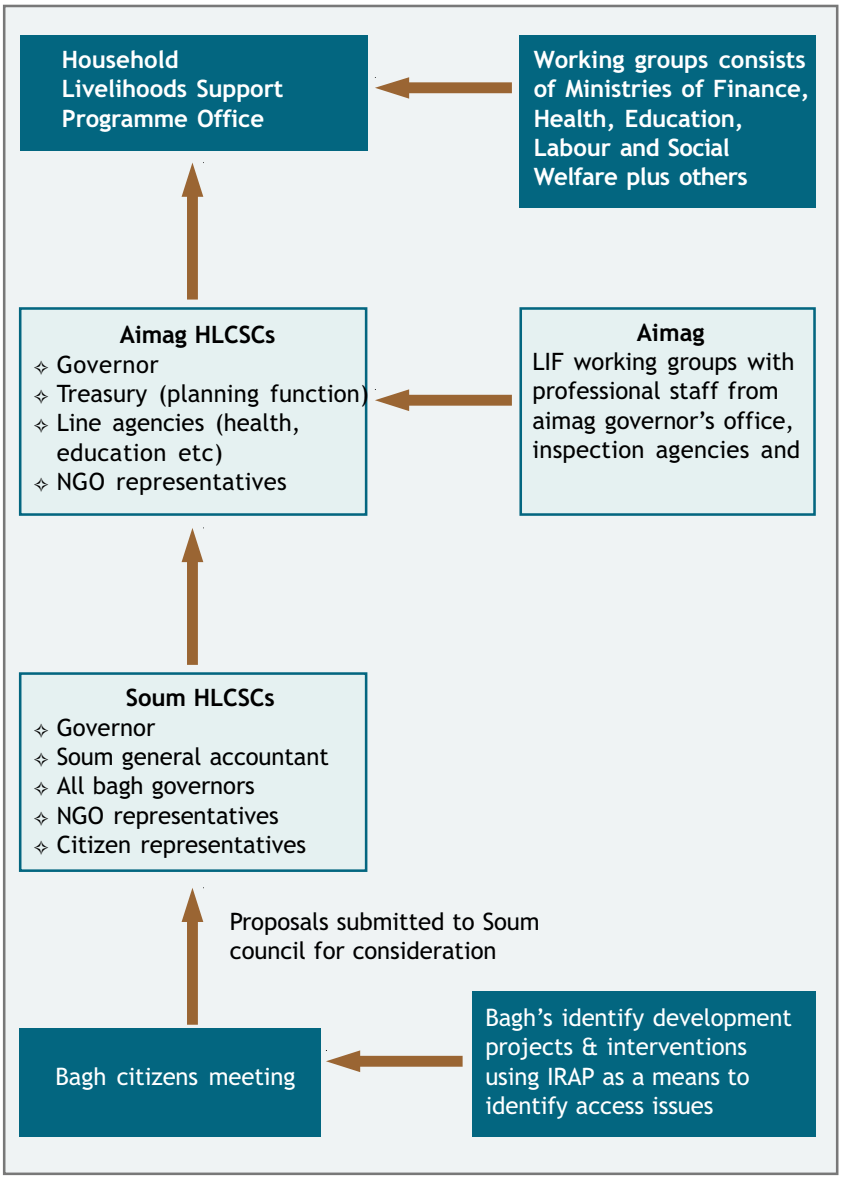
It is envisaged that this process will be integrated into the national regular planning process through two paths:

1. Through the central role of the aimag governor and the planning personnel in the aimag HLCSC under the Local Development Fund (LDF) of SLP which is implemented in 13 non-pilot aimags and 8 districts of UB.
2. Through the gradual phasing in of regular budget in financing the projects proposed by the Soum HLCSC and the Aimag HLCSC under the LIF of the SLP which is implemented in 8 pilot aimags and one district of UB. The proposed process is that the local budget counterpart will be increased from 10 percent in Phase-1 to 30-40 percent in Phase-2 to 70-80 percent in Phase-3. Currently, not more than 90% of the funds for sub-projects come from the SLP through the LIF.

It is hoped that the HLCSC will become more responsive to the development needs at local level and over time a strong local decision making forum will compliment and inform the national development priorities.

[1] people's participation to include both women and men, young and older, able bodied and those with disabilities.

Figure 1: Sustainable Livelihoods Project's Decentralised & Participatory Planning Process



Part one of this publication details the development and testing of the IRAP process in Mongolia. Part 2, the Annexes, contain information to enable IRAP to be implemented, in the first instance under the SLP, but in future throughout the country.

PART ONE

Chapter 1:

Integrated Rural Accessibility Planning - IRAP

Over the last twenty years, the International Labour Organisation (ILO) has been developing tools and capacity building processes to strengthen the capacity at local government level to better provide the goods, facilities and services that rural people need. This package, known as Integrated Rural Accessibility Planning and often referred to as IRAP helps to identify investment priorities that will address the access needs of rural communities.

As a planning tool IRAP aims to improve the accessibility of rural people to the various economic and social goods, services and facilities that they need in their daily lives. It does so by considering the following 3 issues: (i) improving transport infrastructure facilities to the desired facility or service; (ii) bringing the facility or service closer to the community; and (iii) a combination of both i and ii. It endeavours to address three basic questions that relate to rural accessibility, transport and infrastructure:

1. What should be done?
2. Where should be done?
3. How should be done?

IRAP helps determine the answers to these questions by showing where the access problems are most acute. Therefore, interventions identified using IRAP are usually identified in the following:

Improve access to facility X, in village Y with intervention Z

IRAP introduces an area based approach to improving rural accessibility. It identifies specific access needs and seeks to address them through an integrated approach. It is a bottom-up process for planning, meaning that it enhances local level participation and promotes an efficient bottom-up planning process for rural access in general and rural infrastructure in particular. IRAP introduces a set of planning procedures, which are based on the access needs of the rural population and seeks to maximize the use of local resources.

IRAP components

There are three components to the IRAP tools, termed T1, T2 and T3.

- T1 introduces the concept of accessibility planning, develops the data gathering questionnaire and prepares base maps of the areas undergoing the IRAP exercise.
- T2 analyses the data and ranks sector problems and village priorities
- T3 takes this information and develops project proposals that reflect sector and village priorities in terms of access.

IRAP is a low-tech approach to integrated planning. It uses data gathering techniques such as village based questionnaires, hand-made mapping and the formulation of simple calculations to assess, score and rank communities' access problems to social and economic goods, services and facilities.

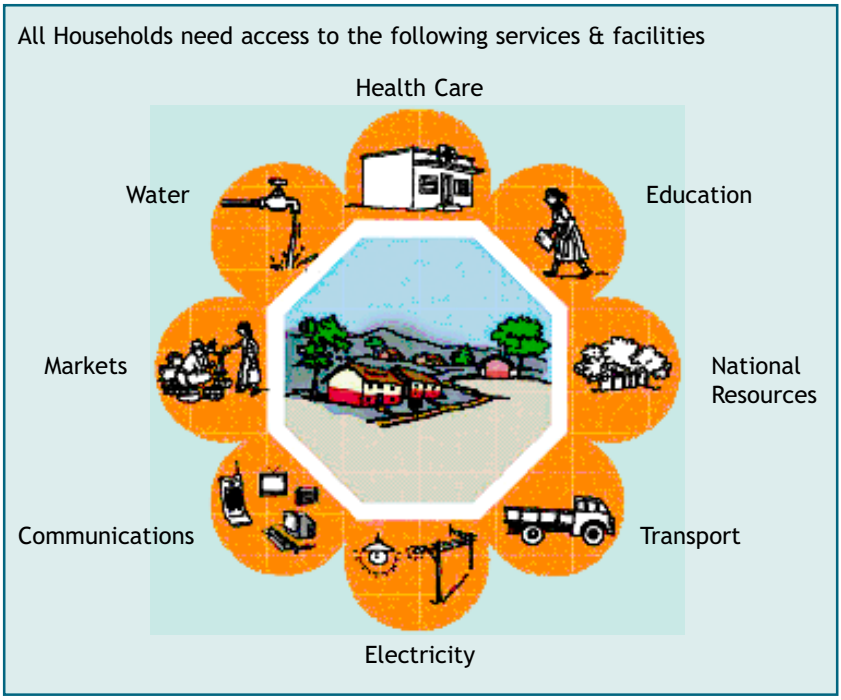
Defining Accessibility

Accessibility can be defined as the ease or difficulty of reaching or using a facility or service and therefore concerns both the mobility of people and the availability of services. Mobility is associated with transport infrastructure as well as the means of travel and transport.

All households (including all household members such as the elderly the young and the disabled), rural and urban, poor and rich need to have access to facilities, goods and services in order to fulfil their basic, social and economic needs (Figure 2). To address issues of accessibility, the following three elements are analysed:

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

Figure 2: Household access wheel



The concept of using accessibility to goods and services as a determinant of development needs started around 20 years ago. At that time donors began to see that their, usually, large investments into road construction had not resulted in the assumed improvement in rural peoples lives.

The ILO was commissioned to study the travel patterns of rural households in developing countries of Asia and Africa in a bid to understand why large scale road investment had failed. Results from the study showed that rural households did not use the major roads in the majority of their daily travel activities. Importantly the study revealed that rural transport was characterised by the following: most trips involved people carrying small loads over short distances; the majority of trips were done on foot, far from the actual road; most travel activities were done to access basic goods, services and facilities and finally ownership of vehicles of any kind was very low.

In conclusion, the elements of rural transport were found to be those of mobility and proximity and access could therefore 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 sources, schools, health centres, markets) which is a non-transport intervention and;

Common mode of rural transport

2. Through improving the mobility of rural people so that they can travel faster, more easily, more conveniently and less expensively and this is a transport intervention (including rural roads, tracks, trails, foot bridges, waterways).

IRAP was developed as a means to address previously neglected rural communities by measuring their actual travel and transport activities.

The ILO has developed country specific IRAP procedures in the following countries in South and South-East Asia; India, Orissa State, Nepal, Thailand, Lao P.D.R, Cambodia, Indonesia and the Philippines. In each case the way IRAP has been developed has been different. The tools in the IRAP procedure allow for specific focus and are flexible enough to adapt to changing circumstances. Annex 2 provides further details.

It should be noted however, that in wider development theory, access and accessibility can also include many other elements. Elements such as class, culture, disability, gender and religion also play a large part in people's ability to access services and facilities.

Accessibility Issues in Mongolia

The Mongolian context is very different to the other countries in which IRAP has been developed. With a population of approximately 2.7 million in an area of 1,564,116 sq km Mongolia has one of the lowest population densities in the world.

In addition, Mongolia has a long and well developed culture of nomadic herders who are well adapted at moving themselves and their livestock through the extreme climates that affect the country throughout the year. However; the country also has a growing settled community who live, predominantly in rural areas, in small communities known administratively as baghs.

It is in these settled communities of baghs and soums that IRAP has been developed. IRAP will support the decentralised planning activities implemented by the SLP which encourage the participation of local level bodies in the identification of development needs .

Collecting water

A study of the travel and transport characteristics of households in the two pilot soums (Batsumber soum and Jargalant soum of Tuv aimag) was undertaken. The survey asked 5 basic access questions; i) where do people go for particular services; ii) how often do they travel there; iii) how long does it take; iv)what method of transport do they use; and v) what, if any, are the problems they encounter accessing that particular service or facility?

Results showed that the majority of trips were made within the soum. This was done either by utilising motor vehicles, walking or on horse. The soum centre was the central focus for the baghs as this had the soum hospital (primary health care services); the secondary school; and some agricultural/livestock supplies. For advance medical treatment and access to main markets and supply outlets, people in both soums travelled to the capital Ulaanbaatar, as this was closer than their own aimag centre. Long distance travel of this sort was undertaken in hired cars,

taxis or buses or personal vehicles. What was clear from the initial survey was that people's main accessibility problems centred on the quality of service available; in many cases schools and health centres were poorly serviced and maintained and the quality of roads and tracks was bad and this hampered people's mobility during the winter times. In general, the baghs and soums had to cope with infrastructure that had fallen into disrepair and neglect.

Whilst it can not be said to be reflective of the other areas of the country; these two soums could be seen as representative of soums close to major urban centres in other parts of the Mongolia.

The methodology developed for IRAP in Mongolia is able to be mainstreamed throughout all areas of the country with some adaptations to reflect the diverse geographical and population characteristics. Furthermore, once IRAP has been applied to more soums within an aimag a comparative analysis of accessibility conditions in each soum can be compared to guide the aimag in identifying soum investments

IRAP in Mongolia

IRAP will be implemented by the SLP and used by the Soum HLCSC and Bagh Governors to help identify local level development needs that can then be funded by the Local Initiatives Fund (LIF).

Unlike the other countries in which IRAP has been developed in Asia, Mongolia's low overall population but large nomadic population present challenges to the methodology of IRAP. IRAP is based on the assumption of fairly stable population numbers, but the initial travel and transport survey shows that the two pilot soums experience heavily fluctuating population numbers throughout the year, due to herder families.

While there is a growing number of herders who are more settled, those herders with bigger numbers of animals will move more frequently to ensure sufficient pasture for their livestock. However, these nomadic herders have, in the main over the years built up sufficient levels of self-reliance. For the purpose of developing an IRAP procedure in Mongolia, a decision was made to concentrate on the settled inhabitants of the baghs, both those in permanent housing and those in gers that remain in the area all year.

Chapter 2:

IRAP Exercise and Steps

IRAP Methodology in Mongolia

Although IRAP is often referred to as a planning process, it is not. IRAP consists of a number of planning tools and these are used within a standard planning process to strengthen it by introducing needs based methods that identify access needs and prioritise access interventions through participatory methods.

In applying IRAP it is necessary to first identify the objective of applying the tools. Will they be used in plan formulation or will the tools be used for the identification of project priorities to be funded under a sector programme or rural development project? In the case of IRAP in Mongolia, these tools have been developed to be used by baghs to identify their access needs and potential infrastructure interventions that are then referred to the Soum HLCSC for consideration for LIF funding. Figure 1 illustrates how IRAP contributes and is part of the SLP created Soum HLCSC.

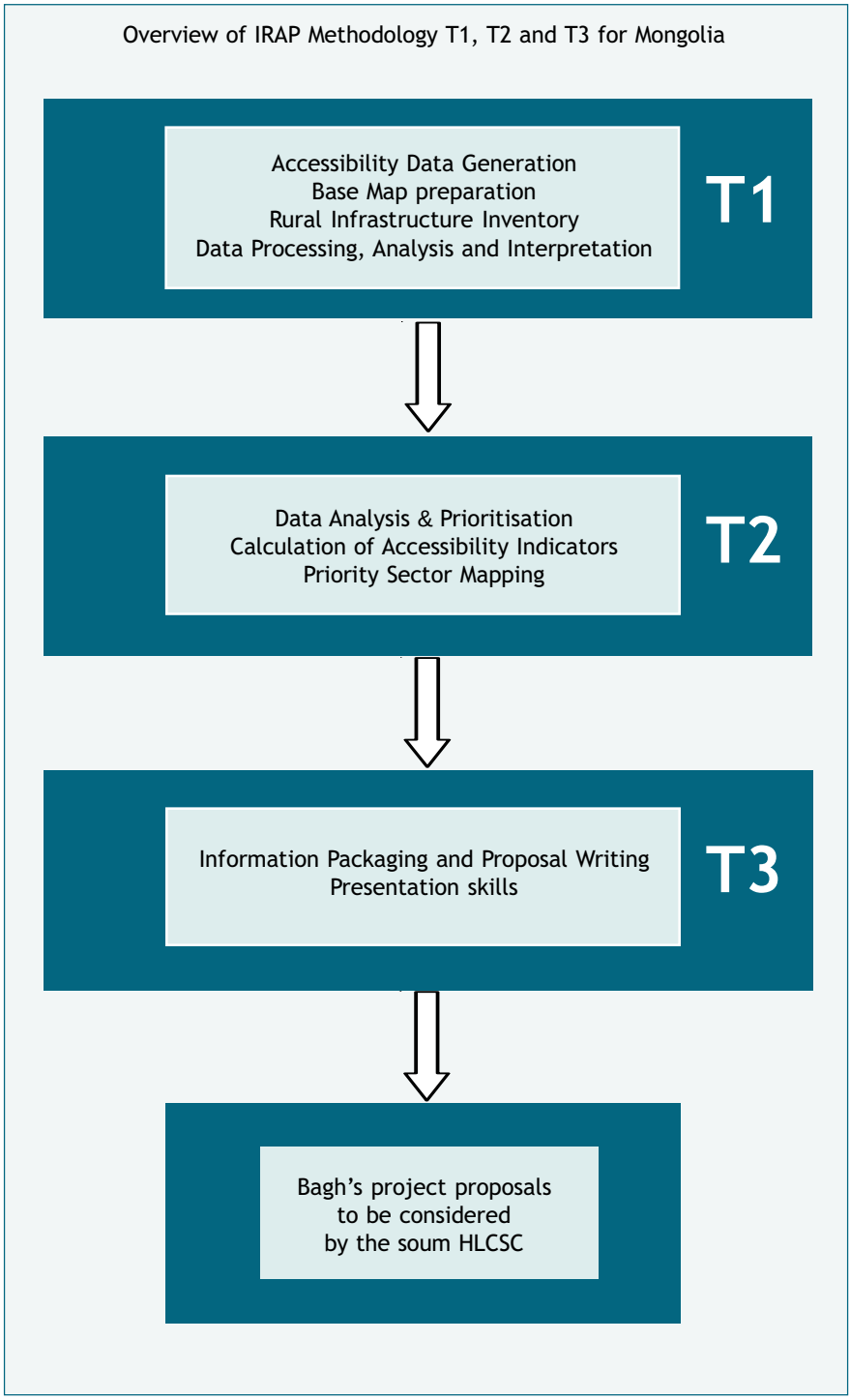
IRAP is carried out at Bagh level

Any agency using IRAP to identify access needs and prioritise access improvement projects needs to first define the geographical area to be covered. This may be a delineated settlement, bagh, soum or entire aimag. Secondly the different sectors that will be addressed e.g. health, education, drinking water, transport etc. in the planning exercise need to be identified. If IRAP is used in the context of general rural development planning it is necessary to identify the access needs of the rural population. General information and some primary knowledge of the area concerned will usually indicate the sectors to be addressed in the planning exercise. It is important though, that IRAP is limited to those sectors where physical access to basic needs and economic and social services are an issue.

Figure 3 illustrates how IRAP has been designed in Mongolia. IRAP for Mongolia consists of two participatory workshops and a number of field and office activities. The outcome of the IRAP exercise is a list of investment priorities on access improvement infrastructure that will address rural household's capacity to reach and utilise the basic goods, facilities and services they require. Each bagh will have a complete accessibility database, a bagh base map and a bagh priority map at the end of the exercise.

The IRAP activities are described in the following chapters.

Figure 3: IRAP in Mongolia



Chapter 3:

IRAP, Data Gathering, Base Map Preparation and Data Process, Analysis and Interpretation

T1 (Activities 1-4)

Activity 1: Introduction to IRAP

The first activity is the introduction of IRAP to the group. The workshop starts with discussion about the theoretical aspects of IRAP; focusing on the rationale behind the application, the data requirements and how these are used to rank communities with respect to their access to basic goods, services and facilities.

Annex 1 provides the presentation and script about the development of IRAP for accessibility planning.

Bagh representatives checking data

Activity 2: Data and Information Collection

Specific data is required for the "accessibility analysis" this includes data on demography and settlement patterns, the distribution of services and facilities, transport infrastructure, transport patterns, infrastructure quality, perceived access problems and access improvement priorities. This data needs to be collected from primary sources if it can not be found in existing data-banks, reports or documents. Data collection can be expensive and time consuming. It is therefore important to limit data collection to an absolute minimum. The more that can be retrieved from existing sources the better.

Secondary Sources of Information

Data collection from primary sources can be expensive and time consuming it is therefore important to use secondary sources of information. Every soum line ministry officer and relevant agency officer annually updates data about their areas providing both social and service information. This information has been summarised at soum, aimag and national level by officers of the National Statistical Office. It is important to invite the social welfare officer who is in charge of such information for the data and information collection activity of IRAP at soum level.

Primary Sources of Information

Information from secondary sources is not usually sufficient for assessing peoples' access needs and identifying interventions for improving them. Baghs will need to be visited to obtain information directly from the communities themselves. The people living and working in the baghs are the best sources of primary information and this should be used to verify and compliment the secondary data. In particular, data pertaining to travel times, travel patterns, access difficulties and the perceived quality of services should be obtained from the people themselves. Key informants to be interviewed include bagh governor, bagh doctor, bagh teacher/ head teacher, community representatives etc.

Once it has been decided what primary data needs to be collected in the baghs, the survey instrument needs to be developed.

The Bagh and Soum Questionnaire's

The data gathering instrument used is a questionnaire. Two questionnaires have been developed to gather bagh and soum level accessibility data. These questionnaires contain basic questions about people's access situation to various goods, services and facilities. In Mongolia, the following sectors are addressed: health, education, drinking water, access to markets and access to public and social services, agricultural and livestock/veterinary services.

Some training is required to implement the survey. Those from the bagh office who will conduct the group interviews need to be instructed on how to organise the meetings, conduct the interviews and record the data. The level of training of course, depends on past experience, however; it is important to ensure a wide representation is present at these meetings. Access data that is representative of the entire community is needed to ensure a comprehensive and true account of that bagh's situation.

Annex 2 provides examples of both the soum and bagh questionnaire

Implementing the Survey

The survey questionnaire is presented to a group of key informants from each bagh; these will include bagh officials (the governor and any other staff they may have), representatives from the school, the bagh doctor, community representatives (including representatives from disadvantaged groups such as the disabled) and any sector representative that may be present in the bagh. During this key informant meeting, the purpose of IRAP is explained as well as how the outputs that come for the exercise will be used to inform the Soum about pressing infra-structure improvements that are needed.

It is always worth going through the questionnaire first to ensure that all the participants understand what is being asked of them. It is during this time that any clarifications or further explanations should be done.

Transport Inventory

As well as gathering data on peoples' accessibility to the various goods, services and facilities that they need. IRAP also collects data on an areas transport infrastructure. A transport inventory form is filled in by the key informants during the key informant meeting; this form asks for the origin-destination of roads in and around the bagh, their length, surface cover and number of crossings and quality of road.

Table 1: Transport Inventory Table

Road Name	Origin-Destination	Length (km)	Surface Crossings	Number of Water
1.				
2.				
3.				

Activity 3: Data Compilation

Raw data usually comes in different forms and formats; in hardcopies or electronic versions. The different data sets need to be compiled into a properly structured database so that analysis of the accessibility situation can be done. If possible data should be displayed in graphs, tables and charts so that it can be easily understood. It is also important that data is standardised; for example, people often talk of taking 'the morning' to fetch water, this needs to be translated into a time frame either of minutes or hours.

Table 2: Access to Water - Batsumber Soum

Settlement		Engineered Well					
Batsumber		No in Bagh	No of potable wells	No of HH supplied	Operating Hours		Fetching Time (mins) Travel, collect & return
	HH				Hrs/day	Days/wk	
Bagh 1	558	4	2	558	24	6	30
Bagh 2	313	-	-	-	-	-	-
Bagh 3	405	4	3	156	2	7	40
Bagh 4	213	6	1	78	7	7	30

Population and Household Data - Batsumber Soum

Settlement	Population		Male		Female		Households			House		Ger	
Batsumber		%		%		%		Ave Size	%		%		%
Bagh 1	2,380	38	1,270	39	1,110	36	558	4.27	37	320	57	227	41
Bagh 2	1,828	29	947	29	881	29	405	4051	27	-	-	-	-
Bagh 3	1,259	20	639	20	620	20	313	4.02	21	270	86	43	14
Bagh 4	835	13	398	12	437	14	213	3.92	14	156	73	57	27
Total	**6,302**		**3,254**		**3,048**		**1,489**						

All the 'raw data' collected from the bagh surveys needs to be organised in a database, which is essentially a collection of files. A database is prepared at soum level (or within the project office) where all bagh data is entered and bagh aggregates generated. This database is referred to as the Accessibility Database (AD).

The organised data together with the accessibility maps (see next activity) will be further analysed to make a preliminary situation analysis of the area concerned. The focus of this analysis is on understanding the access needs and patterns of rural people and on the identification of access problems and priorities. The ultimate goal is to improve the access that rural people have to the required goods, services and facilities by identifying appropriate access interventions.

People have different access needs for different sectors. Furthermore, there will be various levels of inaccessibility within certain sectors. These need to be assessed for all relevant sectors. Access needs as perceived by bagh residents may differ from what is acknowledged as access needs by sector specialists. Before analysing the data it is necessary to prepare accessibility profiles and accessibility maps of areas concerned. Accessibility profiles consist of accessibility indicators (see Activity 6, Chapter 4) which are individual measurements of access to specific goods, services or facilities. Accessibility Maps display accessibility data and indicate where people live and where they go to for their basic social and economic needs (next activity).

Data compilation is actually done between T1 and T2/T3 workshops in preparation for the T2 activities. The AD enables the project office (SLP and LIF project staff) and bagh representatives to review the data collected, validate and correct any misleading or incorrect data and draw from the data a soum-wide picture of accessibility conditions amongst the baghs.

Activity 4: Accessibility Mapping

Accessibility maps are a graphical representation of access conditions at bagh level. Accessibility maps help in the analysis of the access problems and access priorities and guide in the selection of the best development options. Specifically, accessibility maps:

- Provide local planners and decision makers with a picture of the geographical location of resources, service facilities, population centres and the nature of their linkages;
- Aid in the analysis of access information to facilitate the identification and location of access problems thereby favouring the systematic formulation of interventions and programmes of action;
- Enhance the communication of information and/or recommendations to decision makers and other interest groups for the preparation of appropriate and responsive plans and programmes;
- Provide a "common language" among the various institutions, interest groups and organisations concerned with local development; and
- Document the impact of development programmes and projects to guide future development actions.

Figure 4: Bagh Accessibility Maps

The mapping exercise helps to develops group participation and discussion

Bagh Accessibility Maps

Accessibility mapping begins with the creation of the base maps. These maps are based on reference maps already published. For the development of the Mongolian approach, topographic maps of both Jargalant and Batsumber soums (1:100,000) and their respective baghs (1:40,000) were purchased from the Centre for Policy Research in Ulaanbaatar. These maps show the different baghs and indicate the location of households and ger settlements, service facilities, transport infrastructure and topographic features. Sometimes such a map exists, but in most cases it is necessary to prepare one from scratch. It is important that the map is simple, showing only the basic physical features mentioned above. Maps should not contain too much information as this make them difficult to read and they should be large enough to be seen by from a distance during public meetings.

Table 3: Preparation of Bagh Base Maps

Step 1	Draw a base map on tracing paper using the Bagh map handed out in the T1 workshop. It is best to have an A0 size for the Bagh map. If required, enlarge the original map.
Step 2	Delineate the Bagh boundaries
Step 3	Colour the map using a variety of light colours to identify the different settlements. Colouring procedures will be demonstrated in the T1 workshop
Step 4	Identify existing infrastructure and service centres on the tracing paper overlay
Step5	Finalise the map with the appropriate names, legend, orientation etc.

Annex 3 provides further details on IRAP map preparation.

Chapter 4:

Accessibility Indicators, Accessibility Profiles, Local Priorities and Priority Mapping

T2 (Activities 5-9)

The purposes of T2 activities are to identify investment priorities which address the access needs of the bagh communities. This takes place in a participatory manner, the bagh representatives will analyse the collected data, calculate the access indicators, draw priority maps and identify priority interventions in each bagh in preparation for presenting their project proposals to the Soum and Aimag HLCSC and staff of the HLSPO.

T2 activities cover data analysis and interpretation, identification and prioritisation of access needs and project formulation. T3, the final stage, will look at project information packaging and presentation.

Activity 5: Data Analysis and Accessibility Indicators for prioritisation

Between the T1 and T2 activities, bagh officials (and SLP and LIF project staff) will compile the data collected into the AD so that it can be used during the data analysis and Accessibility Indicator (AI) calculation.

Accessibility Indicators

An important step in the IRAP process is the calculation of Accessibility Indicators, known as AIs. AIs are used to identify investment priorities and compare baghs with each other and where available with national averages, standards and targets. Data in the accessibility database (AD) is used to calculate the AIs. Bagh and soum officials and project staff will analyse the AD and determine levels of access within the different baghs in each soum. This will be followed by the identification and prioritisation of investment needs.

The AIs are numeric values that describe the current accessibility conditions of households to basic goods, facilities and services. In most cases the AI values are used to distinguish clusters of households within a study unit to identify those that experience relative difficulty in accessing basic services. In Mongolia the study unit is the soum with the bagh as the data generating level.

Accessibility depends on both proximity and mobility which is measured with AIs and the results indicate the degree or severity of an access problem; a high AI implies poor access.

In Mongolia, the following AI was developed: the number of households affected and the amount of time spent travelling to a particular facility or service. The AI for a specific service or facility is represented in the following formula:

$$AI_{SECTOR} = HH_{AFFECTED} + TT$$

This AI is then used for all the clusters of fixed households in each bagh to produce a ranked list of household access by sector. As the AI deals with an absolute number of households and travel time in minutes, the higher the value means the higher the access problems are to that particular service or facility. Table 4 illustrates the data used to calculate the AI for access to drinking water in Batsumber soum. As shown, the sums of column C and D are added to produce the AI score then each bagh is ranked according to its score, the higher the score, the higher the access problem. In the example given, Bagh 3 is ranked 1 with a score of 318, indicating it has the greater access to drinking water problem.

$$AI_{WATER} = HH_{NOT\ SERVED} + TT$$

Table 4: AI - Access to Drinking Water, Batsumber soum

	A	B	C	D	E	F
Bagh	Total HH	Total HH served	Total HH NOT served	Water fetching time (mins)	AI=C+D	Rank
1	576	565	11	45	56	4
2	405	156	241	40	281	2
3	313	15	298	20	318	1
4	213	108	95	45	143	3

Annex 4 provides the AI calculations for all the sectors covered in the Mongolia IRAP exercise.

Activity 6: Accessibility Profiles

The accessibility profile is a summary of each baghs access situation without the AI calculations. It is done so that each bagh will have an easily understood brief overview of its situation which can be viewed at a glance and used as the introduction to the presentations when the baghs present their findings and project proposals to the Soum and Aimag officials.

Using the bagh data gathered during the T1 stage, bagh representatives will prepare bagh accessibility profiles containing the following information:

Calculating in the AIs

Table 5: Information required for the Accessibility Profile

- **Basic Information**
  - % of households with gers
  - % of households with house
  - % of households with house in bagh centre during winter/ summer
  - % of households with ger in bagh centre during winter/ summer
- **Health**
  - Bagh doctor - ration of bagh doctor/population
  - Travel to soum hospital - cost and time
- **Education**

Primary:
  - Primary school-age population
  - Number of primary school-age children not in school
  - Number of classrooms
  - Number of teachers

High School:
  - travel time and
  - cost to get to Soum Centre

- **Travel to UB (or Aimag)**
  - Travel time
  - Cost
- **Electricity**
  - Number of HH served
- **Water**
  - % of HH served by engineered well
  - water fetching time
- **Markets**
  - Travel time to UB
  - Cost
- **Public services: presence/ absence; travel time; cost to source of service**
  - Public bath
  - Agricultural inputs
  - Veterinary and livestock services
  - Credit
  - Cultural services
  - State services

Activity 7: Local Priority

The Local Priority score identifies the perceived soum-wide need for improving access in a particular sector by the residents of that soum. The use of 'local priority' is an important component of the IRAP tools. The AIs will produce an objective statement of the access situation based on data gathered at the local level. Asking key stakeholders to state their priorities engenders the communities to highlight their perceived subjective new (based on day-to-day activities) of access problems and helps to foster a more participatory process amongst the representatives.

During the T2 activities, the key stakeholders are asked to score all possible basic services and facilities as either: very important, important or not important.

Local Priority	Score
Very Important	3
Important	1
Not important	0

Calculating the LP_{SCORE}

The settlement pattern in the baghs and soums consists of a mixture of permanent dwellers and nomadic herders. To get a clear and concise picture of soum priorities it is necessary to get the views of key bagh officials and leaders, representatives of various government departments, soum and aimag decision makers, herders, NGOs, community organisations and other concerned parties. To obtain the sector local priorities, list all possible basic services and facilities needed by the baghs, ask each representative to score each facility or service using the scores from the LP_{SCORE}. Tabulate the results using the service facilities as rows and the respondents in separate columns, add the rows and then sort the results to highlight the top three soum priorities as declared by the bagh representatives. Table 6 shows the results of the Local Priority table for Jargalant Soum, as can be seen, the top three facilities deemed most important are jointly, health and water, with education coming third.

Table 6: Local Priority Rank and Weight for Jargalant Soum

Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank
Health	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60	*1
Education	3	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	58	3
Water	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60	*1
Market	1	3	1	1	3	1	1	1	1	1	1	1	1	3	1	3	1	1	1	1	28	*9
Electricity	3	3	3	1	3	3	3	1	1	1	3	3	1	3	3	1	3	3	1	3	46	6
Agriculture	1	3	1	1	1	1	1	1	1	1	1	1	3	1	1	3	1	1	1	3	28	*9
Public bath	1	1	1	1	1	3	1	3	1	3	3	3	1	1	3	3	1	1	1	1	34	7
Veterinary	1	1	1	1	1	1	1	1	3	1	1	1	3	1	3	1	1	1	1	1	26	11
Credit	1	1	1	1	1	3	1	1	3	3	3	1	1	1	1	1	1	1	3	1	30	8
Culture	1	1	1	1	1	1	1	3	1	0	1	1	3	1	1	1	1	1	3	3	27	10
State	1	3	1	3	3	3	3	3	3	1	1	3	3	3	1	3	3	3	3	1	18	5
Transport	3	3	3	3	3	1	1	1	3	3	3	3	3	3	3	3	3	3	3	1	52	4

(* equal place)

Activity 8: Identification of Priority Projects

Having, during this T2 stage, calculated the AIs for the sectors and ranked the baghs' according to the severity of their access to a particular facility or service (Table 4) and also asked the baghs to identify their perceived priorities in terms of access to services and facilities and ranked the sectors accordingly (Table 6), Activity 9 looks at the identification of priority projects to improve baghs' access.

Through group discussion the participants are asked to come up with common and responsive interventions within their limited financial and technical capacity to address access issues in their baghs. The formulation of these interventions should adhere to the IRAP principal of either a) bringing the facility or service closer to the people or b) bringing the people more easily to the facility or service. The result of these participatory discussions will be a list of prioritised project options by sector. Examples from the pilot exercise in Batsumber Soum include:-

Batsumber Soum Priority Project Interventions

1) The provision of a motorbike for the bagh doctor;
2) Construct a new bagh doctor hospital;
3) Rehabilitation and furnishing of bagh doctor's hospital;
4) School gym furnishing and rehabilitation of gym;
5) Rehabilitation of bagh primary school building.

Presenting the Bagh's priority interventions

As these examples show, they are a mixture of 'physical' access issues and 'quality' access issues. For instance, intervention (5) "Rehabilitation of bagh primary school building" was raised as an issue to help prevent the bagh's children having to attend primary school in a neighbouring bagh and having to either travel for long distances or board away from home during term time.

Project ideas generated during this activity will be further developed during the T3 activities into workable and realistic project proposals that will be then presented to Soum and Aimag officials and project staff for consideration for funding under the LIF.

Activity 9: Priority Mapping

This is the final activity in the T2 process, the priority maps aim to provide a graphical representation of accessibility conditions and help in guiding the identification and prioritisation of the clusters of households that are most affected. From the bagh maps produced during T1 the bagh representatives prepare another map which shows the locations of their proposed projects and their intended beneficiaries. These maps will also help in presenting the justification for the bagh proposals. A large scale soum map will help the bagh representatives in visualising the geographic relationship of all the baghs' interests with one another.

Bagh priority intervention map

At the end of the T2 activities the bagh representatives will have prepared individual bagh profiles, a list of sector priorities, a list of access improvement project proposals and a map indicating the location of these projects and other relevant information.

Chapter 5 details the activities for T3 which include proposal formulation, information packaging and presentation skills.

Chapter 5:

Information Packaging and Presentation Skills

T3 (Activities 10-11)

Having completed the IRAP procedure, the baghs and soum now have a clear picture of accessibility needs in their areas. At the end of T2 activities, initial project interventions to improve bagh access were identified and these were agreed to be developed into project proposals. Between the end of T2 activities and the final presentation (T3) to Soum and Aimag officials and project staff, the bagh representatives need to go back to their communities and present to bagh citizens' meeting the findings and conclusions of the IRAP exercise and why certain interventions were chosen to be developed further. It is important for the bagh as a whole to be a part of these decisions and to understand the process.

Activity 11: Information Packaging

Information packaging is essentially organising information and relevant materials to enable the bagh representatives to present and share the outcomes of the IRAP exercise. The previous activities produced both the information and materials; the T3 activities now put this all together. At the end bagh representatives will present their project proposals to the soum and aimag representatives as well as SLP project staff for consideration for LIF funding.

There are several activities that need to be undertaken in preparing the presentation; the information should be packaged according to the following steps.

Basic Information

Basic information has been organised in the bagh accessibility profile (T2, Activity 6). The profile aids in identifying bagh household needs and problems that should be addressed by appropriate interventions. The profile should easily convey accessibility information as well as accessibility needs and problems.

Maps

The bagh map shows where the accessibility issues are - what sectors or facilities have been identified for interventions. A graphical representation of the problems and the possible solutions will help the audience understand easily and clearly the dynamics surrounding the proposed projects. The map can provide the "big picture".

The objective of the presentation is to inform the decision makers (in this case the Soum and Aimag officials and SLP staff) with the least amount of information the access needs of the area and the potential solutions to them. For instance, background information should not be too detailed and projects should not look too complicated. The intention of the presentations is to get the decision makers to look favourably upon the proposals being presented.

Activity 12: Presentation

Giving a good and concise presentation requires some skill, the basic rule for any presentation is to deliver the message, in this case the proposed projects, within 10-15 minutes and be prepared to answer questions immediately afterwards to provide any additional information that the soum and aimag representatives want.

A presentation should have the following:

1. Opening statement
2. State the objective of the presentation
3. Description of existing conditions
4. Refer to bagh access profile and maps
5. Statement of need
6. Identify the households experiencing difficulty and state which are the priorities
7. Strategy on how to address this need
8. Describe the intervention possibilities and state which one is the most appropriate
9. Description of the access improvement project
10. Describe the financial and human resources required for this project
11. Expected benefits
12. Describe the expected benefits of this intervention
13. Estimated cost
14. Provide a ball-park estimate at this stage on the cost of the project
15. Closing statement

Review what you have said briefly and ensure that the audience understands the importance of your project proposal

It is a good idea to have a dry-run at the presentation so as to ensure that the information is correct and the structure of the presentation is well thought out.

Annex 5 provides further details on presentation skills and content.

PART TWO

Annex 1: Training Schedules

The following 6 annexes provide the operation materials needed to undertake the IRAP exercise. It provides direct material that can be used during the workshops as well as examples of completed IRAP exercises that can help guide the IRAP trainer in the procedure.

The IRAP exercise contains two workshops and several office based activities. The workshops usually last 1 - 1 ½ days, depending on the number of attendees.

Draft Training Schedules

T1 Workshop

DAY 1	
9.00 - 9.30 am	Registration
9.30 - 10.00 am	Opening Ceremonies Welcome Address Opening Remarks Introduction of Participants and Guests Structure/Mechanics of Training/Workshop
10.00 - 10.15 am	Tea Break
10.15 - 11.15 am	Introduction to IRAP
11.15 - 12.00 pm	Application in Mongolia Open forum - discussion
12.00 - 1.00 pm	LUNCH
1.00 - 2.00 pm	IRAP tools: Questionnaire Accessibility Mapping
2.00 - 3.30 pm	Workshops Design of IRAP Questionnaire Accessibility Map preparation
3.30 - 3.45 pm	TEA
3.45 - 4.45 pm	Continue workshops 1 and 2
4.45 - 5.00 pm	Review day one activities

DAY 2	
9.00 - 9.15 am	Review Day 1 activities
9.15 - 10.15 am	Transport Infrastructure Inventory (open discussion)
10.30 - 10.45 am	TEA BREAK
10.45 - 12.00 am	Integration of IRAP information
12.00 - 1.00 am	Data process, Analysis and Interpretation
1.00 - 2.00 am	LUNCH
2.00 - 2.30 am	Review of T1 activities
2.30 - 3.00 am	Closing ceremonies

T2/T3 Training Workshop

DAY 1	
9.00 - 9.30 am	Arrival of participants
9.30 - 10.00 am	Introduction to training workshop objectives
10.00 - 11.00 am	Session 1 Review of IRAP Presentation and review of result and significance of data generated
11.00 - 11.30 am	Open forum
11.30 - 11.45 am	TEA BREAK
11.45 - 1.15 pm	Session 2 Review, validation and updating of tabulated data
1.15 - 2.15 pm	LUNCH
2.15 - 3.15 pm	Session 3 Accessibility Planning Tools Development and use of AI
3.15 - 3.45 pm	TEA BREAK
3.45 - 4.45 pm	Session 4 Development of Bagh Accessibility Profile
4.45 - 5.00 pm	Review of day's activities

DAY 2	
9.00 - 10.00 am	Session 5 Identification of priorities by sector
10.00 -11.00 am	Session 6 Identification of Priority Projects
11.00 - 11.15 am	TEA BREAK
11.15 - 12.15 pm	Session 7 Priority Mapping
12.15 - 1.15 pm	Sessions 8 - 10 Information packaging Preparation of presentation materials Dry-run of presentations
1.15 - 2.15 pm	LUNCH
2.15 - 3.15 pm	Continuation of Sessions 8-10
3.15 - 3.30 pm	Wrap - up review of entire IRAP exercise and commitment for future action.

Annex 2: History of Accessibility Planning and Transport needs

Briefing Script for power point presentation on the development of Integrated Rural Accessibility Planning

Introduction

This Briefing Kit has been designed to provide a simple and concise introduction to Integrated Rural Accessibility Planning (IRAP) and how it can support and strengthen existing local planning processes. IRAP is a simple inexpensive and easy-to-apply planning tool which has been tested and used in various countries in the Asia region. It has been found to facilitate problem identification and prioritization procedures, which result in a systematic conceptualization of interventions and formulation of realistic and responsive development projects.

History

The concept of using accessibility to basic goods and services as a determinant of development needs started when representatives of several donors, notably the Canadian CIDA, Swedish SIDA, NORAD (Norwegian), the SDC (Swiss) together with representatives from the International Labour Organization (ILO) and the World Bank, met informally to talk about the investments that the donor communities had placed in several developing countries. The discussion focused on a common feeling that in spite of the massive investments in the construction of roads in rural areas, the expected improvement of these areas had not materialized. Conditions in these rural communities had not changed from 30 years ago.

The ILO was commissioned to study and determine what the reason was this lack of development and poverty reduction. The study was conducted in several countries across Asia and Africa look specifically at the travel patterns of rural households in a bid to understand how aid investment in roads had addressed them.

Significant findings of the ILO study are the following:

Findings of an ILO study on the daily travel patterns of the rural household

- 80% of household trips were within the village;
- Only 3% of all trips were for agricultural purposes;
- 75% of all trips were done on foot

No. 1 Results of ILO Study

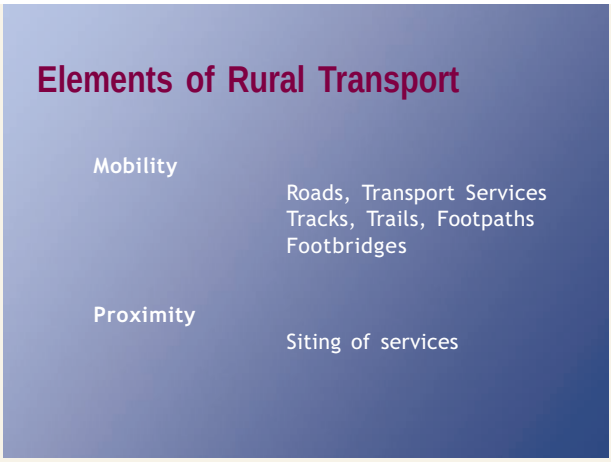
The results of the ILO study reveal that (read/interpret the slide text). Clearly, the rural households do not use the major roads in most of their travel activities.

ILO study provided a better understanding of the Nature of Rural Transport

- Most trips involve carrying small loads over short distances;
- Majority the trips are done on foot and far away from the roads;
- Most travel activities are to avail of basic goods, services and facilities; and
- Vehicle ownership of any kind is very low.

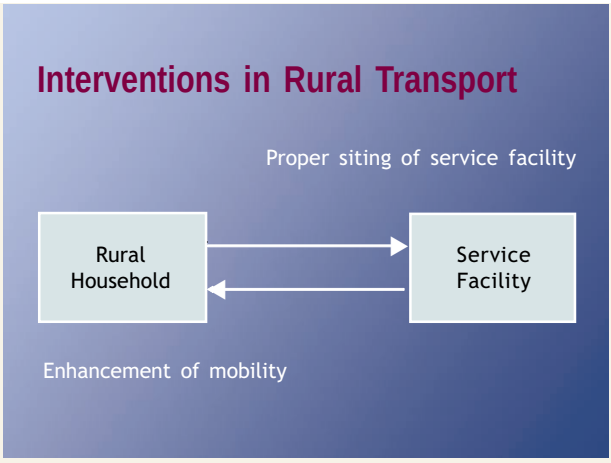
No. 2 Nature of Rural Transport

The study also provides a more realistic description of the nature of rural transport, distinguishing it from the traditional thinking of motorised vehicles running on paved roads. Rural transport is characterised by the following: (read text). Rural transport therefore, does not necessarily mean roads and transport systems as traditionally perceived in transport planning but also covers non-traditional elements such as non-motorised vehicles, footpaths and trails.



No. 3 Elements of Rural Transport

The study also provides a better understanding of the elements of rural transport. These are: mobility, which relates to (**read slide**); and proximity which deals with the location of a service facility or where a facility should be set up so that beneficiaries can easily reach and utilise it.



No. 4 Interventions in Accessibility Planning

With this understanding of the elements and nature of rural transport, one can easily conceptualise on basic yet appropriate interventions (**show slide**) to address the rural households' needs. These are: either bring the people easily to the service facility or sources of goods, or bring the facility closer to the people. The first one deals with enhancement of the people's mobility, which is transport-related; and the other is concerned with the proper siting of service facilities.The ILO study has provided us with an alternative approach on how to better appreciate the felt needs of the rural households. This new understanding calls for the development of a planning tool that can address the said needs of the rural households, but at the same time should be made simple, easy to apply and not resource-intensive.

Local Level Planning

- For whom or for what is planning done for?
- How can planning reflect the actual potential for rural development?

No. 5 Local Level Planning

In local level planning, two questions easily come to mind. One is, for whom or for what is planning done for? And, how can planning reflect the actual potential for rural development?At first glance, the answer to the first question is rather obvious. Planning is for people, although we consider a lot of things to do a plan, the bottom line is still how can it benefit the people. The answer to the second question is equally simple, but the issue is more complex than that. Allow me to elaborate.

Local Development Planning

- Respond to actual people's needs
- Related to national goals and targets that government has set
- Local government standpoint: major issue is investing limited resources in a most cost-effective way
- Household level: taking advantage of rural investments means using facilities provided

RURAL INVESTMENT HAS NO VALUE UNLESS PEOPLE CAN USE THEM

No. 6 Local Development Planning

(Reveal the contents of the slide as you discuss the issues)

We say that local level planning is for people, therefore should reflect their actual needs. However, from a national point of view, local level planning should conform with national goals and targets that the government has set, such as increase in agricultural production, development of rural industries, higher literacy rate, lower infant mortality rate, or general integration of the nation through improved communication.

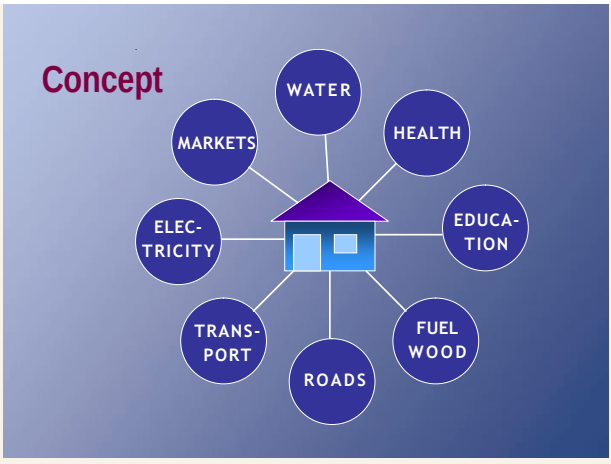
However, from the standpoint of the local government unit (LGU), the major issue in relation to rural development is that of how to invest limited resources in the most cost-effective manner. At LGU level, a major concern is how to optimize the use of its meager development funds.

At the household level, the issue is more basic. Household members are not concerned with national goals and targets, nor do they think of the LGU's limited resources. Their main concern is how can the household members take advantage of facilities provided? The problem they face is how can the household members reach and utilize the sources of basic goods and services in the area. This leads us to conclude that rural investment has no value unless people can use them. Unless we free the people of the burden to just reach the facilities, rural investments may turn out to be wasteful spending. (cite examples of such infrastructure investments).

No. 7 Integrated Rural Accessibility Planning (IRAP)

The previous discussion leads us to the need for the development of a planning procedure that responds to access needs of the rural people and, a planning procedure that is not resource intensive and easy to use.

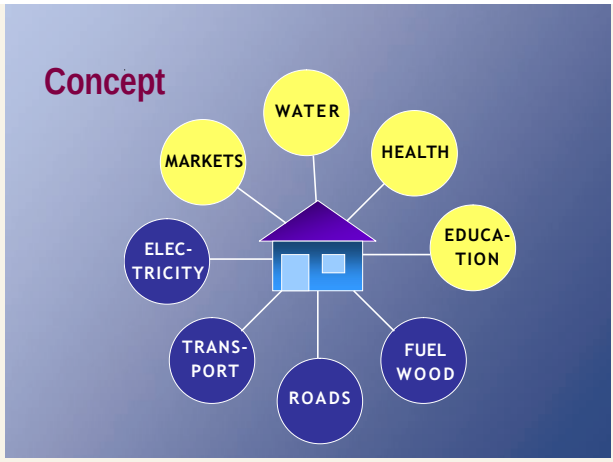
The IRAP procedure has been designed to satisfy these conditions.



No. 8 IRAP concept slide 1

The Integrated Rural Accessibility Planning procedure – IRAP, takes the rural household and examines its travel patterns. It has been established that rural households have to have access to (**enumerate the circles around the household**).

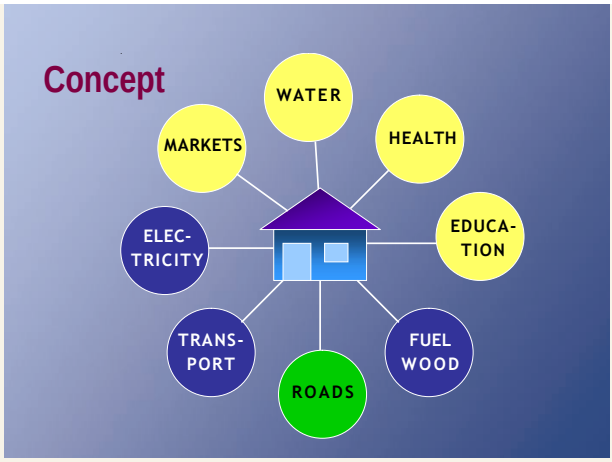
IRAP looks at how the households access (**click to show lines connecting household to access targets**) basic goods, services and facilities. The relationship of the household to the target facility (**refer to lines connecting household to circles**) can be described as the ***accessibility indicator***, an expression of the ease or difficulty of the household's ability to reach and utilize the target facility.



No. 9
Point source of service

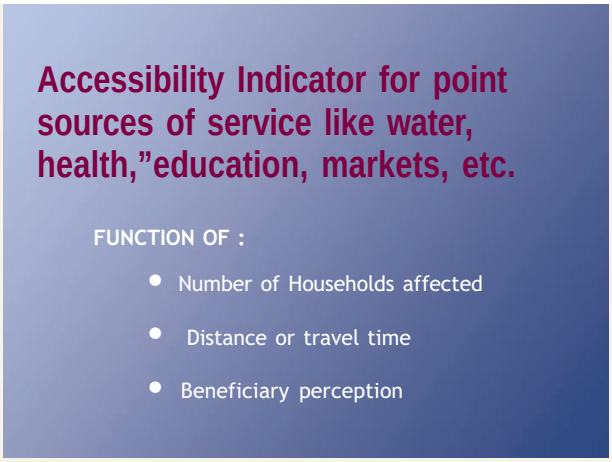
(click to indicate the point sources of service)

Markets, health, water and education can be referred to as point sources of service, or they can be represented as points on a map.



No. 10
Non-point source of service

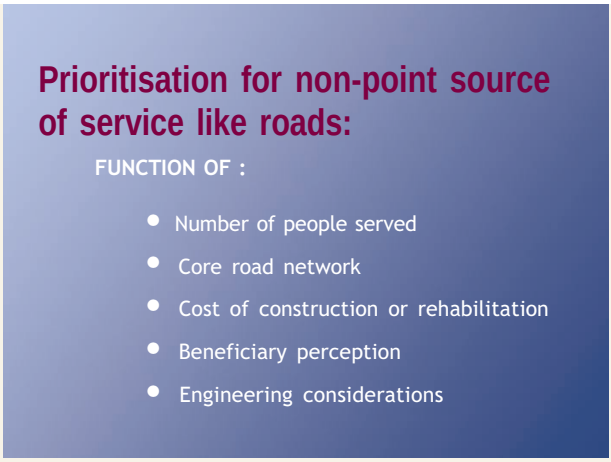
On the other hand, the procedure also deals with non-point of source of service such as a road (**click to indicate road**), which can be represented as a line on map.



No. 11 Accessibility Indicator for point sources of service

For point sources of service such as water, health, education and market, the accessibility indicator is a function of (**read from the slides as the items are revealed**).

It can be noticed that beneficiary perception, or how the intended beneficiaries view their needs, is considered in the determination of the accessibility indicator. It has been experienced that some priorities change once the views of the beneficiaries are taken into account.

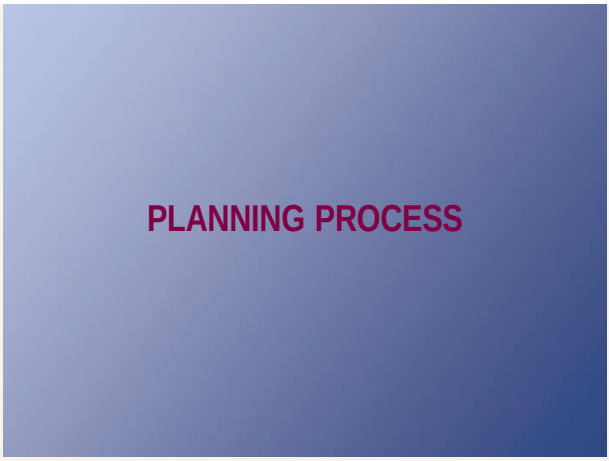


No. 12 Accessibility Indicator for non-point of service

For non-point source of service, such as a road, the accessibility indicator is a function of the (**read from the slide as the items are revealed**).

The ILO has developed a procedure such that the variables that describe the ***AI***, like number of households affected, travel time, distance, etc., are provided a numeric value to facilitate in describing the ease or difficulty of a community's access to a specific service. A simple mathematical procedure computes for the value and if said values are sorted in descending order, and the ranking of the communities with regards to access characteristics to a specific service is produced.

Taken individually, the AI for a Bagh or Soum centre does not assume any meaning at all. It can only assume some meaning if compared with the other values from the other Bags.

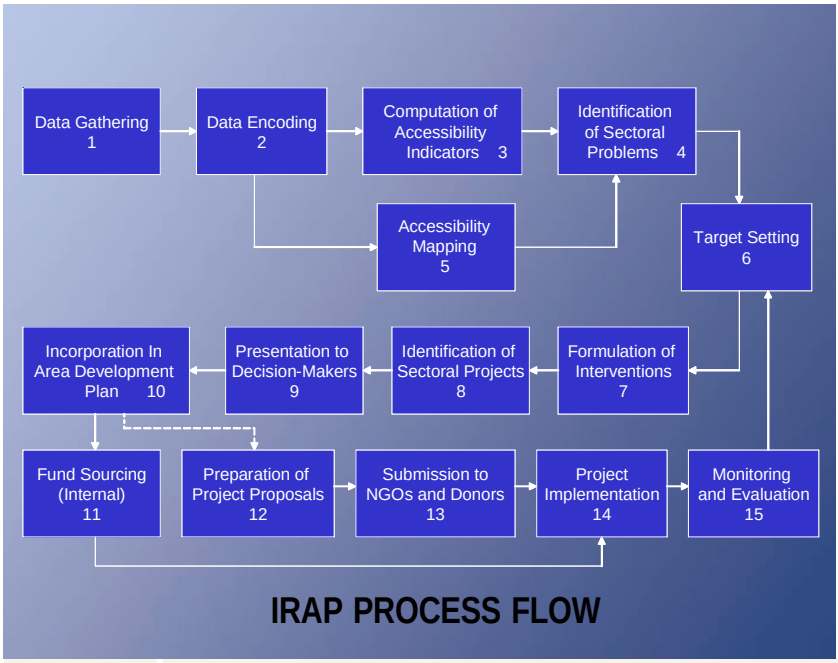


No. 13 Planning process

Let us now discuss a generic planning process that is being taught in school and is used as basis for most planning activities.

No. 14 Generic planning process

The steps in the planning process are the following (**read from the slides as the description of each step is revealed**).



No. 15 IRAP Planning process

In IRAP, nothing was reinvented as the process is just an elaboration of what was presented in the preceding slide. ***Steps 1-5*** is situational analysis, where ***Step 4*** on accessibility mapping is added to translate access information into a graphical presentation and facilitate understanding even by those without technical training or background. Once the problems, issues, needs and potentials are determined, we go into ***Step 6*** or Target Setting to address the problems and needs determined in situational analysis. ***Step 7*** is the formulation of interventions following the IRAP approach that prescribes: bringing the facility closer to the people thru proper siting of services; or, bringing the facility easily to the people by improving on their ability to move around. ***Step 8*** deals with the translation of the IRAP conceptual interventions in Step 7 into specific access-improvement projects. This is to be done by the local planners and staff. The outcome is then presented to decision-makers in ***Step 9*** as planners can only suggest, recommend or propose for projects to be considered for funding and implementation. The proposal should be incorporated into the area development plan in ***Step 10*** for the needed funds. Once the plan is approved and funds are allocated in ***Step 11***, the proposed access-improvement project is implemented in Step 14. Monitoring and evaluation, Step 15, can then be undertaken to determine if the target is attainable or not. If funds are not available but the local government feels that the project is indeed important, a project proposal can be prepared ***Step 12*** and submitted to NGOs or donors in ***Step 13*** for the needed funding support, and continue the process.

Annex 3: Bagh and Soum Questionnaires

Bagh Questionnaire
Name of Bagh
Area Km2
Name of Soum
Name of Aimag
Data collected by
Date

1. General Characteristics of Bagh

Bagh Population				
	In Bagh Centre		Outside Bagh Centre	
	Winter	Summer	Winter	Summer
Total population				
Male				
Female				
Total households				
Permanent houses				
Gers				

2. Travel and Transport Characteristics

How far is Bagh Centre from Soum Centre?		Km
How do people travel to the Soum Centre?		
Mode of Transport	Travel time (round-trip) mins	Travel Cost Tg?
Bus		
Private Car		
Motorbike		
Horse		
How do people travel to Ulaanbaatar/Aimag Centre?		
Mode of transport	Travel time (round-trip) mins	Travel Cost Tg?
Bus		
Private Car		
Motorbike		
Horse		

3. Markets

Is there a market in the Bagh Centre?	Yes (✓)	No (✓)

If there is NO market in the Bagh, where do residents to buy household supplies?				
	Location	Distance (km)	Travel time (min)	Travel Cost (Tg)
Aimag				
Another soum				
Other (please state) ----------				

4. Electricity supply

Does the Bagh centre have electricity service?	Yes (✓)	No (✓)

What is the electricity source?		
Power Source	Number of HH served?	Frequency of Service
Generator		
Main Grid		
Other (please state) ----------		

5. Water Supply

Describe the Bagh centres drinking water sources and supply					
Facility	No of HH served	Duration of service		Water fetching time (travel + waiting) (mins)	Cost of water (Tg)
		Hrs/day	Hrs/Week		
Spring					
Engineered well					
Piped service to home					
Other (please state) ----------					

6. Health Service

Please list the facilities in the Bagh Centre				
Facility	Number of beds		Number of staff	
Family Hospital				
Hospital				
Clinic				
	Location	Distance (km)	Travel Time (mins)	Travel Cost (Tg)
Private Doctor				
Dental Clinic				
Other (please state) ----------				

6.1. Quality of Health Facilities

Details about health facilities in Bagh Centre						
Facility	Type of staff	Frequency of service	Provides vaccination?	Have laboratory?	Sell basic medicine	Physical status (describe)

6.2. Further Medical Services

Where do Bagh residents go for additional medical services?				
	Location	Distance (km)	Travel Time (mins)	Travel Cost (Tg)
Aimag Hospital				
Another Soum				
Other (please state) ----------				

6.3 Medicines

Where do people go to buy medicines?				
	Location	Distance (km)	Travel Time (mins)	Travel Cost (Tg)
Pharmacy 1				
Pharmacy 2				
Pharmacy 3				
Pharmacy 4				
Other (please state) ----------				

7. Education

How many school aged children are there in the Bagh?	
How many are NOT in school?	

Please indicate if the Bagh has the following education services?						
Facility	Location	No of pupils	Capacity	Grades	No of classrooms	No of teachers
Kindergarden						
Primary school						
Secondary school						
Post-secondary school						
Other (please state) ----------						

7.1 Dormitory Facilities

Are there dormitory facilities in the Soum? Y/N?	
If YES, do they provide for the following?	
Primary school pupils (total number)	Secondary school pupils (total number)

7.2 Quality of Facilities

Please describe the facilities available					
Facility	Toilet (Y/N)	Water supply (Y/N)	Playground (Y/N)	Library (Y/N)	Science Laboratory

8. Transport Service

Please describe the Bagh centre's main road access						
Road name	Length (km)	Links to?	Surface condition	Transport service available	Frequency of service (hrs/day)	Transport cost to main centre

9. Access to Other Services

Where do people go to buy the following?				
	Location	Distance (km)	Travel Time (mins)	Travel Cost (Tg)
Credit				
Agricultural inputs				
Livestock supplies				
Veterinary services				
Others (please state) ----------				
Others cont ----------				
Others cont ----------				
Others cont ----------				

10. Physical Accessibility Problems

Please describe the physical accessibility problems experienced by Bagh residents				
	Problem Level (v)			If big problem - why?
	Big	Minor	No problem	
Primary school				
Secondary school				
Health services				
Domestic water supply				
Transport				
Electricity				
Farm land				
Markets				
Agricultural supply centres				
Livestock supply centres				
Veterinary services				
Others (please state) ----------				

11. Access Priorities

	Please describe the top 3 priority sectors to improve physical access	Interventions needed to improve physical access
1.		
2.		
3		

Annex 4:
Accessibility Mapping

Accessibility mapping in IRAP is designed to achieve two things; the first is to facilitate the understanding of access conditions in the study areas and the second is to provide a simple user friendly visual aid that will effectively convey information. The Accessibility Maps that the bagh representatives use in analysing the access conditions in their respective areas are the same maps they will use in the presentations to decision makers of their findings and recommendations.

Such tools and techniques will aid the major actors of local development, in this case the bagh, soum and aimag representatives and the programme staff, in understanding resources, development potentials and constraints for the formulation of responsive and realistic development plans and programmes.

The objectives of the mapping exercises have already been discussed in Chapter 3. This Annex will now detail the step-by-step process of producing the various maps

that the IRAP procedure requires. The mapping techniques are used for creating both the base maps and the priority maps.

The accessibility maps are prescribed with the following scales:

Topographic Soum Maps = 1:100,000 scale
Topographic Bagh Maps = 1:40,000 scale

These are available from the Centre for Policy Research, Ulaanbaatar.

Materials required:

These materials are readily available locally and are reasonably priced. The following are needed:

Tracing Paper	one (1)	roll
Oil Pastel	one (1)	set of Pentel Brand 12-color (minimum)
Lighter Fluid	one (1)	bottle
Cotton wool	one (1)	roll
Colour Pens	one (1)	set
Mechanical Pencil	one (1)	set
Erasers	one (1)	per bagh
Masking Tape	one (1)	roll
Coloured sticker paper		various colours

The base maps should reflect the following information:

(a) Bagh centres and surrounding inhabited clusters;
(b) Major service facilities such as schools, health centres, rice mills; multi-purpose pavements, and other point sources of services;
(c) Primary and secondary road links and their existing conditions; and
(d) Major drainage channels and water bodies.

BASE MAPS PREPARATION	1:100,000 scale for soum maps 1:40,000 scale for bagh maps Reflect population centres, road network, water bodies and channels, vegetation, major facilities, etc.
IDENTIFICATION AND LOCATION OF POINT SOURCES OF SERVICE	Identify and locate basic service facilities such as schools, health facilities, markets, agricultural and livestock supply shops
DETERMINATION OF AREAS OF INFLUENCE	Using the results of the survey, delineate areas of influence for each basic service facility
EXAMINATION OF ACCESS CONDITIONS WITHIN THE CATCHMENT AREA	Evaluate access conditions as to roads, transport service facilities, number of house-holds affected, finished, on-going and proposed projects that may influence accessibility needs
IDENTIFICATION AND PRIORITIZATION OF ACCESS PROBLEMS	Compare sectoral catchment areas and identify and prioritise access problems
RECOMMENDATION OF APPROPRIATE INTERVENTIONS	Recommend and locate appropriate interventions for each sectoral access needs
IDENTIFICATION OF PRIORITIZED SECTORAL PROJECTS	Consolidate recommended interventions and propose projects to address prioritized access problems

COLOURING

Colours are applied on the maps for readability thereby facilitating the delivery of information, findings and recommendations to decision-makers and other interest groups. Colours to delineate the baghs are directly applied on the reverse side of the tracing paper using the oil pastel colours and thinned to erase application strokes using cotton balls with a few drops of lighter fluid. Colours that go beyond the desired area to be covered can easily be erased using any ordinary pencil eraser.

Roads and other links can be identified using colour pens while the service facilities can be represented using the fluorescent colour papers cut with an ordinary office paper puncher.

Labels on the maps can be done either free-hand

Annex 5: Accessibility Indicators

WATER

	A	B	C	D	E	F
Bagh	Total HH	Total HH served	Total HH NOT served	Water fetching time (mins)	AI=C+D	Rank
1						
2						
3						
4						

HEALTH

	A	B	C	D
Bagh	Total HH	No. of Bagh Doctors in Bagh	AI=B/A	Rank
1				
2				
3				
4				

EDUCATION

Primary Education (ratios to be compared with Government standards and norms)

	A	B	C	D	E	F	G	H	I
Bagh	Total HH	No. of primary aged children	School in Bagh?	No of class-rooms	No of teachers	Pupil/ class-room ration	Pupil/ teacher ratio	Rank F	Rank G
1									
2									
3									
4									

Primary Education

	A	B	C	D	E	F
Bagh	Total HH	Primary school age population	If no, where do pupils go?	Travel Time (mins)	Cost	AI=B+D
1						
2						
3						
4						

Secondary School

	A	B	C	D	E	F	G	H
Bagh	Total HH	Secondary school age population	Secondary school in bagh?	If NO where do students go	Travel Time (mins)	Cost	AI=B+E	Rank
1								
2								
3								
4								

MARKET

	A	B	C	D	E	F
Bagh	Total HH	Market in bagh Y/N?	If NO, where do residents go?	Travel Time (mins)	Travel cost (Tg)	AI+A+D
1						
2						
3						
4						

PUBLIC SERVICES

Public Bath

	A	B	C	D	E	F
Bagh	Total HH	Public bath in bagh Y/N?	If NO, where do residents go?	Travel Time (mins)	Travel Cost (Tg)	AI+A+D
1						
2						
3						
4						

Agricultural production services

	A	B	C	D	E	F
Bagh	Total HH	Agricultural production services available in bagh Y/N?	If NO, where to residents go?	Travel Time (mins)	Travel Cost (Tg)	AI=A+D
1						
2						
3						
4						

Veterinary services

	A	B	C	D	E	F
Bagh	Total HH	Veterinary services available in bagh Y/N?	If NO, where to residents go?	Travel Time (mins)	Travel Cost (Tg)	AI=A+D
1						
2						
3						
4						

Credit

	A	B	C	D	E	F
Bagh	Total HH	Credit facility available in bagh Y/N?	If NO, where do residents go?	Travel Time (mins)	Travel Cost (Tg)	AI=A+D
1						
2						
3						
4						

State services

	A	B	C	D	E	F
Bagh	Total HH	Are state services available in bagh Y/N?	If NO, where do residents go?	Travel Time (mins)	Travel Cost (Tg)	AI=A+D
1						
2						
3						
4						

Cultural services

	A	B	C	D	E	F
Bagh	Total HH	Is there a cultural service in bagh Y/N?	If NO, where do residents go?	Travel Time (mins)	Travel Cost (Tg)	AI=A+D
1						
2						
3						
4						

Annex 6: Presentation Skills

The outcomes of the IRAP exercise have resulted in the individual baghs' identifying small-scale infrastructure improvements to certain goods, facilities or services in their locale. The examples given in Chapter 4 from Batsumber soum show that access priorities tended to concentrate on the rehabilitation or new construction of facilities. These interventions are then written up into proposals which will be presented to the Soum Governor for his/her consideration for LIF funding under the Sustainable Livelihoods project.

The actual presentation of the proposed projects would normally take place a few weeks after the IRAP exercise has been completed; this will give the bagh representatives time to discuss with their bagh residents the proposal being presented.

The presentation itself should be no more than 15-20 minutes long. It is important that the person chosen to present the proposal has a clear understanding of the project and has previously rehearsed what he or she will say. If there is a group of bagh representatives also attending the meeting it is important that they do not interrupt the speaker during the presentation. This will only add to confusion and leave the impression that the bagh has not sufficiently prepared their proposal or idea.

To aid the presentation, it is useful to have the bagh base map; the priory map and the bagh profile placed on either a wall or flip chart so the speaker can refer to the information during the presentation.

A good rule on how to structure the presentation is to think in terms of the following:

1. Introduce to the audience what you are going to tell them;
2. Tell them;
3. Conclude by telling the audience what you have told them.

The presentation must contain only the important information that the Soum Governor and project staff need to hear. Keep it brief as there will be time immediately afterwards to ask the audience if they need further explanation or clarification.

Remember, however, tempting it is ensure that the rest of the group dose not interrupt this discussion. It is important that there is only one focal person from the bagh - the speaker - who will answer questions. On occasion, however, if the project intervention is specialised, it will be necessary for the speaker to ask that another bagh representative with a greater knowledge of the subject to answer a particular question or query.

RECENT RURAL ACCESSIBILITY TECHNICAL PAPERS (RATPs)

No. 1 Ron Dennis, Rural Transport and Accessibility - A Synthesis Paper, ILO Geneva, 1998

No. 2 Kanyhama Dixon-Fyle, Accessibility Planning and Local Development. The application possibilities of the IRAP methodology, ILO Geneva,1998.

No. 3 Geoff Edmonds, Wasted Time - The Price of Poor Access, ILO Geneva, 1998.

No. 4 Chris Donnges, Rural Access and Employment - The Laos Experience, ILO Geneva, 1999.

No. 5 Hosted by LGED and organized by IFRTD, LGED Bhaban, Dhaka, Bangladesh, Integrated Rural Accessibility Planning (IRAP) - Expert Group's Meeting, ILO Geneva, 1999.

No. 6 Ron Dennis, Rural Accessibility - Footpaths and Tracks. A field manual for their construction and improvement, ILO Geneva, 2002.

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No. 12 Ashoke K. Sarkar, Integrated Rural Accessibility Planning: Application in Rajasthan (India), ILO Bangkok 2005.

No. 13 Chris Donnges, Jagannath Ojha and Chloe Pearse, Integrated Rural Accessibility Planning in Nepal, ILO Bangkok 2006.

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International Labour Organization
Regional Office for Asia and the Pacific

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ISBN: 92-2-118065-9 & 978-92-2-118605-2 (print)
ISBN: 92-2-118606-7 & 978-92-2-118606-9 (web pdf)