5.2 LIVELIHOODS MONITORING

Problem: **The execution of projects which implement transport interventions risk non-sustainable outcomes if post-intervention impacts are not monitored.**

Solution: **The monitoring and evaluation of livelihood indicators is a requisite component of policy implementation, used to evaluate socio-economic impacts of infrastructure and transport service interventions.**

BACKGROUND

Monitoring and evaluation (M&E) comprise activities that enable stakeholders to evaluate whether a development project and its interventions have been successful or not. M&E is critical if the impact and outcomes of development interventions are to be identified and if lessons are to be drawn to inform future interventions in relation to existing activities (Hussein, 2000).

- **Monitoring:** involves the collection of data on the process of a development intervention while it is being undertaken. Livelihoods monitoring involves longitudinal trends and changes, rather than snapshots of time.
- **Evaluation of impact:** involves the assessment of changes to livelihood outcomes, during and after intervention has taken place.

Livelihoods monitoring and evaluation activities are concerned, not with project activities and outputs, but with the significance of the project to the livelihoods of intended project beneficiaries. Livelihoods M&E draws attention to the relationship *between* livelihood components, and the way in which project outcomes create multipliers which impact directly or indirectly on other livelihood indicators. Indeed, 'livelihood impact monitoring' is used to describe the process of tracking the impact of project interventions on livelihoods during the project lifetime. Conventional assessment of impacts are typically left until a significant time following implementation when impacts are expected to emerge. However, in livelihood analysis and M&E improvement in one element, for example strengthened capital stocks, cannot be judged objectively until all other livelihood components have been assessed (The IDL Group, 2001).

The objective of livelihoods M&E is to 'unpack' the steps between the outputs/purpose and the project goal. The principle step in undertaking livelihoods monitoring and evaluation is to identify the stakeholder beneficiaries of a given project. These are the people for which the impact of the project will be both monitored during the project lifecycle, and evaluated at the end of the project once the goal has been realised. Measurement of impact is typically focused on quantitative assessment including income, productivity and economic rates of return, which tend to neglect social impacts that are immeasurable by conventional performance methods, for example, economic appraisal. Livelihoods M&E aims to consider a range of factors that will inform judgements on the overall poverty reduction impact and the degree to which livelihoods have been improved (Hussein, 2000):

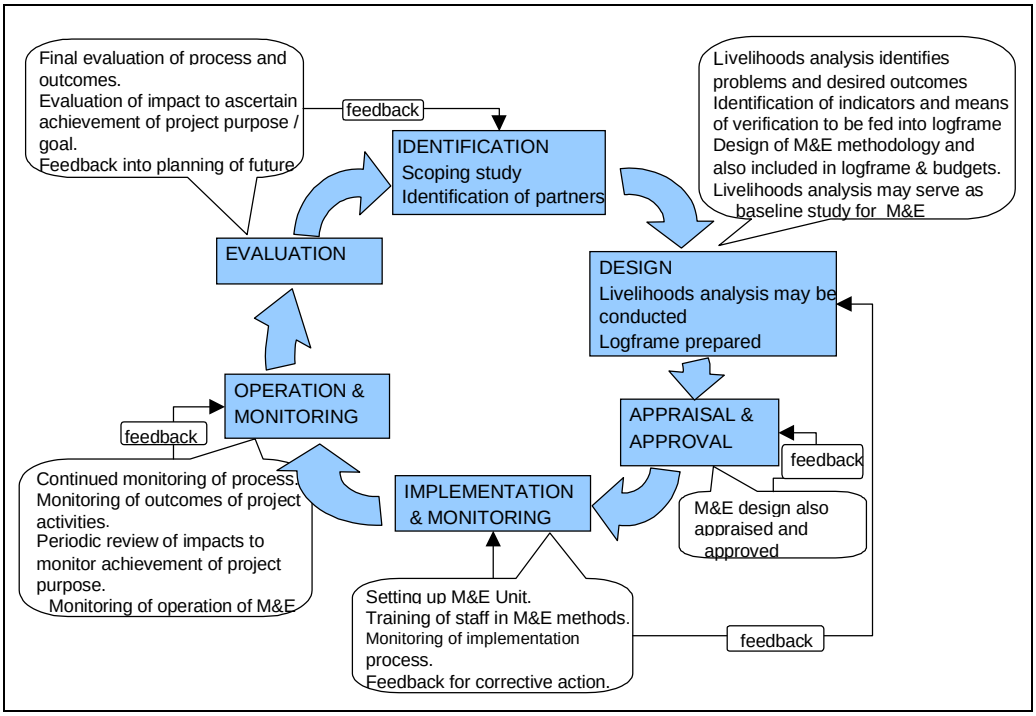
- Production and productivity impacts
- Consumption impacts
- Employment impacts
- Effects on social capital

Livelihoods Monitoring in the Project Lifecycle

Livelihoods M&E can take place at the project, programme and country strategy level. Local governments have a responsibility for the stakeholders of such projects under their jurisdiction (including non-transport interventions), and have a responsibility to monitor project progress and how they impact on the livelihoods of everyone within their sphere of influence, and not just the project beneficiaries. **Figure 1** illustrates how livelihoods M&E fit into the project cycle where monitoring is an iterative learning process with feedback loops correcting implementation and operation and lessons feeding back to the design stage of new development projects and programmes. Livelihoods M&E should also aim to build capacity for continuous learning beyond project completion, and the creation of relevant information for policy and planning decisions (Pasteur, 2001).

As described in Section 2.2, a Sustainable Livelihoods analysis exercise should be carried out at the design stage to provide baseline data from which subsequent M&E activities can draw comparisons. Identification of indicators, and, or benchmarks of 'change' provides a means of verification when carrying out monitoring and evaluation.

Figure 1: Livelihoods M&E in the project lifecycle



Source: Pasteur (2001)

The following describes the main principles by which M&E should be established and operated:

- Participation of all stakeholders affected, including intended beneficiaries throughout the project lifecycle, from design stages through to data collect and analysis of results
- Consultation about what will be monitored, how learning will be shared and action taken
- Learning to feed into improved action
- Flexibility

Inclusion of an M&E approach at the outset of a project is advisable. However there are examples of projects whose objectives are tangible in nature and do not set out with the intention of reviewing project impacts, but result in the monitoring of broader issues over the course of the project. **Box 1** demonstrates a case in point.

Identification of Livelihood Indicators for Project Evaluation

Livelihood indicators are important for M&E processes as they provide a checklist for identifying and measuring trends and changing livelihood outcomes. Indicators may be qualitative or quantitative:

Qualitative Indicators: Perceptions of inequality, vulnerability and power, degrees of food insecurity, subjective indicators of well-being, quality of life, quality of services, relative value of social networks.

Quantitative Indicators: Economic indicators including cash income, expenditure and savings, levels of agricultural production, yields and area planted with crops, livestock populations, infant mortality rates, life expectancy, literacy rates.

Box 1: Feeder Roads Project, Mozambique

The Mozambique feeder roads project began in 1995 to rehabilitate feeder roads for improving physical access for people in rural Zambezia. Provincial rehabilitation priorities opted for labour based methods of road building to achieve this by training and employing a workforce comprising provincially-based contractors and indigenous workers. In 1998, the project shifted focus from the product – the feeder roads – to how the roads and road building affect nearby populations and their livelihoods.

Following an Output-to-Purpose review, a socio-economic component of the project was developed to adopt a livelihoods perspective by asking who the beneficiaries of the road will be and how the road will affect their livelihoods, as well as monitoring the impact on livelihoods of people working on the road. The original project output of building a road to provide physical access became the means to build up further assets and to mitigate negative patterns of change from the road including:

- The threat of displacement by logging and other companies
- A gender imbalance in recruiting women to road gangs
- A conflict of interest between the provision of a road passable by motor vehicles or all year road access by intermediate modes
- The threat of HIV/AIDS to members of road gangs

This project was not designed as a sustainable livelihoods project, but it does prioritise sustainability by bolstering the assets of roadside communities. This case study demonstrates how projects can grow out of a sector but remain sectorally based, and how monitoring of project processes and objectives can address broader issues affecting livelihoods of the poor.

Source: DFID Sustainable Livelihoods Guidance Sheets

At the country level, sectoral performance indicators provide a preliminary and inexpensive assessment of a nation's transport situation. Used with comparators from other countries and specific benchmarks, these headline indicators provide summary information of the national transport system's condition and performance. Understanding transport sector performance requires careful measurement as transport produces pervasive externalities, which are difficult to measure, including congestion, pollution and traffic accidents.

Indicators are a useful but not essential tool for evaluating project performance. Livelihoods M&E attempts to look beyond resource-based definitions of change, for example, increasing agricultural outputs, but rather involves beneficiaries in selecting indicators that define improvements in livelihood outcomes to include well-being.

Transport activity measures are descriptive indicators to place the transport sector in perspective with other sectors. In keeping with the Sustainable Livelihoods Approach, these indicators can be categorised under the five capital assets of the SL Framework. An example of these is shown in **Box 2**:

Box 2: Sustainable Livelihood Indicators

Natural:
- Terrain, soil type and climate
- Frequency and extent of water crossings
- Road and structures: building materials eg. gravel, earth, timber

Social:
- Average social mileage (distance x frequency)
- Access to community based organisations and co-operatives

Human:
- Proximity to potable water source
- Proximity to primary and secondary schools
- Proximity to rural health centres
- Number of patients per health care personnel and pupils per teacher

Physical:
- Average Daily Traffic rates
- Proximity to transport pickup point
- Household ownership of motorised and non-motorised transport
- Road passability in wet season

Financial:
- Per capita income
- Transport expenditure as percentage of total household expenditure
- Rural transport service fare per kilometre
- Rural transport service fare per unit of goods

Assessment methodologies should allow for comparative measurement to assess whether the outcomes of project interventions are desirable. In the context of the sustainable livelihoods framework, it is useful to apply indicators to compare an increase or decrease between capital assets which in themselves are measures of poverty. Through scoring and weighting of indicators, livelihoods M&E can measure where livelihood status is deteriorating and hence where project impact is negative and therefore requires modification to increase capital assets to a sustainable level.

The design of a livelihoods M&E approach is critical for project operations and the issue of indicators in particular is extremely complex, especially when project impacts are linked to the International Development Targets. Common core indicators of change often need to be supplemented with ones that are derived locally and relevant to local populations. There are however some 'lessons' which will aid the development of an M&E approach:

- **Participation in design:** The project M&E approach should be designed in consultation with project beneficiaries, stakeholder, NGOs and Community Based Organisations. Baseline data should be acquired using appropriate participatory methods (refer to Section 2.3), including the identification of wealth categories and impact analysis.

- **Livelihood indicators:** Context specific indicators should consider the following:
  - Impacts disaggregated by gender
  - Impacts disaggregated by wealth
  - Distribution of impact by social group ie. Young, elderly, infirm etc
  - Effects on different ethnic groups and trends in migration and remittances

- **Data collection methods:** Livelihoods M&E should integrate a variety of methods of quantitative and qualitative data collection to provide tangible benchmarks for evaluating change, as well as subjective perceptions of change. Impact measurement should be founded on baseline information and comparison with controls. Surveys should take into consideration seasonality as well as abnormal stresses such as climate change, periods of disease and famine when project impacts are affected by external factors.

In summary, it is clear that performance indicators are partial measures and therefore have limitations which must be interpreted with care. Conventional methods of monitoring and evaluation require less time and commitment of staff and beneficiaries. They can be more effective in gaining a picture of the wider context, and are considered to be more objective. In addition the use of technical equipment such as remote sensing and geographic information systems can be highly effective for monitoring impacts. Participatory methods used in livelihoods monitoring and evaluation are more effective in identifying intangible outcomes and unforeseen impacts and provides opportunities for vulnerable groups to voice their opinions (Pasteur, 2001). Participatory M&E also strengthens capacity of individuals and organisations to have more control in the development process, but requires sufficient time and resources to be applied effectively.

KEY REFERENCES

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