

Chapter 10 Capacity Building

10.1 Objectives

Labour-based methods seem to provide a cost effective means to create assets whilst at the same time generating income and employment in the rural areas. The Government could therefore use the need for roads in the rural areas as a means to solve the problems of lack of disposable income. The income derived from such programmes could be used to stimulate the economy in the rural areas.

The overall objective of the Government is to improve the living conditions and economic opportunities of the people in the rural areas. Within the framework of this overall goal, however, more distinct and specific objectives can be derived for the actors in the road sector.

One is to effectively implement a set of road works interventions which will contribute to the improvement of the conditions of the people in the rural areas. The other is to develop the capacity in the MCTPC and the provincial government agencies to be able to effectively plan, design, manage and evaluate rural infrastructure works.

In terms of the development of the rural areas and the provision of economic opportunities, a rural road works programme can be designed to contribute to this objective through a series of interventions:

- o enhancing access to and from the rural areas,
- o providing direct income from the labour-based construction and maintenance of roads,
- o developing the local small-scale contracting industry, and
- o improving the efficiency of the Provincial government.

10.2 Programme Approach

If labour-based methods are to play a major part in the development of the rural road system then a framework has to be developed so that they can be used effectively. Clearly, the responsibility for this will fall on the MCTPC.

MCTPC has already set the basis for this by setting up a coordinating unit, the Rural Development Committee, whose mandate is to look at all aspects of rural road development. It will be necessary for this unit to set the example in relation to the development of the use of labour-based techniques. This would take the shape of preparing and disseminating guidelines on their application based primarily on the work in Lao PDR. Introductory workshops would need to be arranged for all the DCTPC and DPC to introduce them to the concepts and practice of the technology.

MCTPC could spell out in some detail which tasks and activities labour-based is appropriate for. It could draw together the existing knowledge on productivity and costs to provide a basis for informed choices on the appropriate technology.

In developing this capacity, the MCTPC would be building up its own capacity to define its own programmes. In this way it can present programmes to the donor community rather than having them proposed to it by external sources. The road programmes would then begin to be fully Lao, driven by demand rather than by the supply of funds.

Future rural road works programmes should be designed to develop capacity at headquarters and in the provincial departments by assisting them step by step through the process of the implementation of the interventions mentioned above. Experience from past programmes clearly show that this hands on approach is the most effective and sustainable way to develop capacity.

The key concept is that the local staff should learn by a combination of formal and on-the-job training. Technical assistance should be made available to provide advice, guidance and training to the local staff in all aspects of the implementation of the programme in order that they will be fully conversant with and capable of supervising and administering the programme in the future. In so doing, they will also actively participate in identifying constraints in the system in order that effective measures can be taken to rectify and improve the situation.

Improving access will provide the opportunity to improve the living conditions and economic situation in the rural areas. Developing the capacity of the government and the private sector will ensure that such programmes can be sustained in Lao PDR. The work of ILO and others, relating to labour-based road works technology, has mirrored that from other parts of the world. When sufficient attention is paid to managerial and organisational aspects, labour-based methods do produce roads which are of good quality and are inexpensive. The ILO has developed a basic system of training, organisation and administration which ensures that the potential of labour-based methods can be achieved. This, coupled with the results from the work in Lao PDR can be used to develop capacity in the MCTPC and the provinces.

10.3 The Development of Small Contractors

In future programmes, a significant proportion of the roads can be rehabilitated and maintained, using local small-scale contractors. This is very much in line with government policy and also is logical, given the limited capacity of the government agencies. The use of the private sector takes away some of the burden of responsibility for implementation. The experience of the ILO should be used to develop in each province, through on-the-job training, a cadre of contractors capable of effectively implementing the road works using labour-based technology. The focus of a future programme should be to continue with similar support as ILO has provided to the provinces, however, with the involvement of the private sector by developing small-scale contractors to execute works, while simultaneously building capacity within local government to manage contract works rather than operating force account units.

This will demand new skills being acquired by both groups since contractors can only survive by making profits and need to learn how to manage efficient construction in order to do so. For the government staff, the commercial world is one of legal contractual obligations, deadlines and work schedules and contractors looking for ways to maximise income and profit which may not always be compatible with proper construction standards.

For contractors, labour-based construction can only be really profitable if well organised and managed in terms of labour input and productivity, and for supervisors generally a higher level of inspection is required than for equipment-based work. For contracts managers, labour-based contracts are usually smaller and more numerous than those using equipment and thus the administrative workload is increased.

10.4 Strategy

The overall strategy for the capacity building should be one of process management, in the sense that assistance should be provided from within the Ministry to support and further develop the capacity and experience that already exists and assist their efforts in ensuring that works are carried out effectively by the provincial departments, thereby developing their capacity to replicate and maintain such programmes.

This approach is one in which foreign consultants and advisers would work with the agencies concerned. Solutions are derived through a process of both implementation and learning from that experience and from thorough discussion of each step of the process. The approach is concerned with developing a feeling of ownership of the techniques, methodologies and, eventually, the product that is being developed. This ownership applies not only to the government agencies involved in the

planning and design of the programme but also to the beneficiaries who will be involved in the production of the rural roads and will benefit from it.

Future consultants and advisers therefore need to adopt an approach of teamwork with the intended beneficiaries in order that the solutions relate to the needs of the beneficiaries and that there is a feeling of ownership for whatever solutions emerge from this participatory approach. Only in this way will the solutions become sustainable.

10.5 Need for Technical Assistance

Whilst the need for rural roads is dire, the capacity to plan, design, monitor and supervise construction and maintain the roads is limited in the provinces.

Key Elements to Capacity Building

- o build on existing capacity and experience
- o a flexible team-based approach to programme implementation
- o discussion and consensus rather than advice and instruction
- o use implementation to develop skills
- o defining and taking ownership of the responsibilities at all levels

It is therefore crucial that any rural road works programme place at least equal emphasis on the development of this capacity as compared with actual construction and rehabilitation works. Only in this way will (i) the investments made be sustainable and (ii) the provinces be able to further develop and maintain the road network. The strategy adopted by a future programme should therefore be one of developing capacity through implementation - learning by doing.

In the case of the development of the small contractors, technical assistance is initially required at a relatively concentrated level since there is a large component of training involved. Technical assistance to a future rural road works programme can thus be summarised as follows:

- o to assist and advise the government departments in the implementation of the road rehabilitation and maintenance programme,
- o to provide on-the-job training to provincial government staff on design, planning, contract management and daily supervision of the road rehabilitation and maintenance works using labour-based methods and utilising private sector contractors,
- o to train and develop local small-scale and petty contractors in road construction, rehabilitation and maintenance using labour-based technology, and
- o to ensure proper implementation of administrative and financial procedures to allow small-scale contractors to compete for and execute contracts effectively.

These major operations can be divided into activities which are required at central level and other activities which are more effectively carried out at local level.

10.5.1 Central Level

The main tasks at central level will be to coordinate, support and monitor the road work activities carried out in the provinces. This will mainly be the task of the Rural Development Committee. The support of technical assistance will be necessary to assist the Committee to:

- (a) Establish a capacity within the MCTPC and its provincial departments to plan, implement, and monitor rural road rehabilitation and maintenance works executed by domestic small-scale contractors using labour-based work methods.
- (b) Define the detailed organisational and administrative framework in which the programme is implemented.
- (c) Participate in the development, establishment and presentation of training courses and seminars on labour-based road construction and maintenance works.

- (d) Assist in the management and coordination of all programme inputs provided by the Government, donors and others, ensuring that the inputs are effectively used.
- (e) Liaise with donor agencies (e.g. ILO, SIDA, ADB, WB, KfW, etc.) and other technical assistance staff who may become involved with the programme to ensure a smooth and effective implementation of works.
- (f) Prepare work plans, implementation and material schedules and other programmes.
- (g) Prepare the technical specifications for all procurement of plant and equipment, tools, materials, both local and overseas.
- (h) Negotiate with local banking institutions appropriate arrangements for the contractors' acquisition of tools and equipment.
- (i) Liaise with relevant government departments (i.e. the various MCTPC divisions, Ministries of Planning, Finance, etc.) concerned with the programme, particularly with respect to the development of appropriate administrative and financial procedures facilitating the integration of the programme activities into the administrative system and procedures of the government.
- (j) Monitor and adjust as appropriate systems, procedures and regulations with a view to optimising the prospects of expanding the application of labour-based technology and involvement of domestic contractors for rural road construction and maintenance.
- (k) Participate in the further development/adaptation of standard documentation, guidelines and procedures related to the implementation of labour-based works including technical design standards, work methods, organisation, contract documents, bill of quantities, tendering documents, procedures for contract award, etc. based on initial field trials where the newly developed procedures are tested.
- (l) Monitor the work on contract supervision and quality assurance.
- (m) Monitor payment procedures to contractors with specific reference to the requirements of regular (monthly) payments.
- (n) Assist in the development of an appropriate cost accounting system for contracts.
- (o) Assist in establishing appropriate unit rates for the various categories of work activities executed by the contractors.
- (p) Assist in the effective presentation of the programme to visitors, in a planned manner which ensures that suitable on-site facilities and relevant data are available at all times.
- (q) Assist other relevant provincial departments in identifying the possibilities for labour-based infrastructure works.
- (r) Assist in formulating and preparing new proposals for labour-based road works projects and discuss these with the government and donors.

10.5.2 Provincial Level

Implementation of road works should be entrusted to the provincial departments of MCTPC. Assistance should therefore focus on these institutions. Training and advisory support should be strongest to the DCTPCs. Assistance will be required to:

- (a) Identify the rural road network in the provinces and classify it according to its purpose and overall condition.
- (b) Survey and inventorise the roads and tracks, resulting in a detailed database which describe the condition and location of all road components.
- (c) Identify and collate all programmed road upgrading and rehabilitation works envisaged in the programme area including interventions from on-going projects.
- (d) Develop appropriate levels and quality norms and procedures for rural road construction and maintenance works.
- (e) Prepare detailed road priority plans for rehabilitation and maintenance funding.
- (f) Determine available local resources for road maintenance, including donor support (funds, staff, equipment, materials, petty contractors, etc.).
- (g) Prepare rural road maintenance implementation plans.
- (h) Determine required inputs in terms of funding, training, tools and equipment, consultancy inputs, etc.
- (i) Identify and select small-scale and petty contractors for the road construction and maintenance works.
- (j) Present training courses for government staff and contractors.
- (k) Define the detailed organisational and administrative framework in which the road works will be implemented.
- (l) Integrate the newly developed technology and procedures within relevant provincial departments.
- (m) Implement the road works.

- (n) Monitor and adjust as appropriate systems, procedures and regulations with a view to optimising the prospects of expanding the involvement of small-scale and petty contractors for rural road works.
- (o) Further develop/adapt standard documentation, guidelines and procedures related to the implementation of labour-based road works including technical design standards, work methods, organisation, contract documents, procedures for contract awarding, etc. based on initial field trials where the newly developed procedures are tested.
- (p) Monitor and report work progress in the area of contract supervision, administration and quality assurance.
- (q) Monitor payment procedures to the contractors with specific reference to the requirements of regular (monthly) and timely payments.
- (r) Develop an appropriate cost accounting system for road works contracts.
- (s) Establish appropriate unit rates for the various road works activities.
- (t) Carry out inspections of delivered equipment, set up stores and a stores management system for all spare parts.
- (u) Set up a system for maintenance of equipment and supervise the implementation of the maintenance and repairs.
- (v) Plan and monitor equipment utilisation.
- (w) Conduct training of plant and auto mechanics, store-keepers and other associate staff from the provincial authorities as well as the contracting firms.

10.5.3 Level of Technical Assistance

A future labour-based road works programme needs to be developed gradually, first establishing efficient systems and procedures before it is expanded to cover the entire country.

Based on experience from similar programmes in other countries, it is evident that the road works programme will be limited during the initial period, during which focus will be on development of efficient systems and procedures and staff training. However, it is strongly recommended that a significant road works programme is established in order to gear the capacity building efforts to a reasonable activity level. The staff training will only be efficient if a proper job environment is provided through a significant road works programme.

Considering the weak capacity in the provinces today, there will initially be a relatively high demand for technical assistance. This assistance should provide assistance in both programme development as well as implementation. Gradually, when the government builds up its capacity, the level of assistance is reduced, finally arriving at a nationally implemented programme.

In order to meet the requirements of the above tasks, the following projections of technical assistance is made:

Central Level: 1 Programme Adviser
 1 Contracts Engineer
 1 Training Adviser
 1 Training Assistant (locally recruited)

Province level: 1 Senior Road Engineer (in each province)
 1 Junior Road Engineer (each prov.)
 1 National Engineer (each prov.)
 1 Infrastructure Planner (each prov.)
 1 Mechanical Engineer (covering two prov.)

10.5.4 Logistics

A major problem in the provinces is a uniform lack of resources required to carry out the daily work activities. A future road works programme will need to rehabilitate office facilities, invest in adequate transport for the provincial and district staff and provide sufficient budgets for sundries and field allowances.