## Chapter 3 Policy of the Government

## 3.1 Rural Roads

The government Public Investment Programme includes the following statements relating to rural roads:

"Policy To improve rural communities' access to the main road network.

Strategies	To develop a national programme for feeder road construction in provinces and districts with funds provided through a national programme budget.
Action	Introduce a systematic planning process for feeder roads.
	Increase the allocation of funds for feeder roads and bridges.
	Promote development of private sector construction and maintenance capabilities"

The broad tenets of this were confirmed at the Road Sector Donor Coordination Meeting in February 1996.

With the current socio-economic conditions in the rural areas of Lao PDR, as discussed in Chapter 1, it should be rather clear why the government has taken the decisions as mentioned above. However, it is evident that the government at present does not have the resources to pursue these intentions.

The development of the road transport system continues to be a high priority of the government. In the Public Investment Programme 1994-2000, road transport is the major sector receiving funds. As much as US\$ 439 million out of a total of US\$ 1,340 million is set aside for the road sector. Although national roads will absorb the largest share of the investment, it is planned to expand rapidly the rural network in order to improve market access and the delivery of social services such as health and education in the rural areas. The current investment programme further focuses on integrated rural development in order to reduce shifting (slash and burn) farming, a farming practice which is becoming an environmental problem of great concern. The provision of road access in the rural areas concerned is a main component of the rural development programme. Some US\$ 100 million is allocated for rural roads.

It is generally accepted that the existing road network imposes a serious constraint on the economic development and access to basic needs in the rural areas of Lao PDR. Of the total provincial road network of 5,640 km less than 35% is thought to be passable in the wet season and only half of the population is estimated to have road or river transport access throughout the year<sup>1</sup>.

Although poverty is due to a variety of factors, one underlying cause is the lack of access of the rural population to basic goods and services. For example:

o of the 11,795 villages in Lao PDR, only 723 have health centres. According to UNICEF, over 50% of the villages are more than one day's travel to a health centre. This is a major factor in the relatively high infant mortality rate in the country (estimated to be over 100 per 1000 births) and the low life expectancy;

National Transport Study, Final Report and Appendices, UNDP/IBRD LAO/85/020, Report prepared by SWECO on behalf of MCTPC, March 1991.

- Access to elementary schools is difficult, particularly in the more mountainous regions. It is
  one of the underlying causes of low primary school enrolment and low rates of completion of
  primary school. Only 60% of children enrol at a primary school and 30% complete five years
  of primary school. The average number of years of school attendance is 3 years. In a recent
  survey, over 60% of parents cited distance to school as a reason for their children dropping
  out of primary school;
- Access to agricultural inputs and to markets is difficult because of the lack of roads and the poor state of the existing network of local and provincial roads. The result is that only 10% of the rice produced in the country is marketed. Only one out of every ten farmers use any type of fertiliser or other agricultural input. In addition, even though only a small proportion of the cultivable land is irrigated (3%), it is estimated by FAO that only one in three irrigation schemes is used;
- o Direct access to potable water is a major problem. At a conservative estimate, only 35% of households have access to potable water. One result is high mortality rates due to diarrhoeal diseases.

Of equal importance to the road development works, is the need for comprehensive road maintenance policies and strategies. The ability of Lao PDR to protect its investments in infrastructure will be crucial for its efforts in developing the country.

## Roads in the Central Region.

The general level of rural infrastructure in the five Provinces of the central region reflects the situation in the country as a whole. Infrastructure is limited and where it does exist it is poorly maintained. The result is that the level of infrastructure is a serious constraint to economic and social development.

In the roads sector, there has been a natural concentration on ensuring the viability of the national road network, which comes directly under the jurisdiction of the Ministry of Construction, Transport, Communications and Post (MCTPC). This emphasis is not surprising when one recognises that it is almost impossible to have road contact between Vientiane and the provincial capital of Xiengkhuang, Phonsavan. Even now, only 50% of the national road network in the five Provinces is paved. The situation with the provincial roads is much worse. Of the three thousand or more kilometres of provincial roads in the five Provinces only 23% are passable all year round. It is difficult to provide accurate figures for the number and state of the local roads, but the best estimates suggest that there are some 4,600 km of these roads in the five Provinces and very few are passable all year round. Field surveys suggest that some of these "roads" are no more than tracks.

The general lack of road access has its repercussions in the agriculture sector. The government wishes to put a higher proportion of cultivable area under irrigation. At the same time it wants to reduce the use of slash and burn techniques. At present only 3% of the cultivable land is under irrigation. The reason for providing irrigation is both to increase the amount of food crops that are produced in particular rice and to ensure that there is a surplus for cash sales.

To achieve this, however, requires that the farmer can easily transport his produce to the market. Road access therefore becomes crucial to the success of any programme to increase agricultural production.

## 3.2 Labour-based Road Works Technology

Lao PDR, whilst being a poor country, is surrounded by neighbours whose economies are growing at a very high rate. Lao PDR will definitely benefit from this proximity. However, the difficulty will be for the country to apportion this benefit equitably between its population and in particular between the rural and urban areas. The Government is already focusing on the need to develop the infrastructure in the

rural areas so that the population can have access to goods and services. This provides the *opportunity* for their development. However, for them to take advantage of this they will require an increased cash income. Whilst improved agriculture will be the main source of cash income, it is clear that every opportunity should be taken to provide both income and employment in the rural areas. Labour-based production clearly provides such an opportunity. The evidence suggests that applying these techniques in the construction and maintenance of roads is a viable alternative.

Improving the country's overall road network will be a major component of the Five Years Development Plan. New construction, rehabilitation and maintenance will be involved at all levels of roads: national, provincial and local. Because of the low equipment availability, lack of foreign exchange and relatively low wage levels, adopting labour-based methods in road development work is not only justifiable on employment grounds but would also be cost effective compared with the conventional equipment-based method.

The National Transport Study made clear recommendations on the use of labour-based methods to improve rural roads and to carry out road maintenance (ref. NTS Chapter 55.20):

"As the main national roads are successively completed, an increasing share of the future construction work will be concerned with rural road construction, rehabilitation and spot improvements. This will lead to a rapidly expanding role for labour-based methods in the country and at the same time a reduced need for equipment-based methods. The continued development and application of labour-based methods is therefore strongly recommended."

The NTS also recommended the use of labour-based technology as a means of increasing the involvement of the domestic private construction industry in the Lao road sector (ref. NTS Section 55.25):

" The expected transition from large-scale equipment-based construction to smaller projects improvements, rehabilitations and rural roads - will also provide opportunities for private contractors. Although such contractors are almost non-existent today in the field of road construction, many have been successful in other construction activities. With smaller projects and labour-based methods, less capital will be required and the private contractors can draw on their management abilities and skills in organising labour. Some existing construction firms may diversify into road construction if there is a market, others may develop, and some provincial enterprises may become viable private companies."

In terms of road maintenance, the NTS proposed a strategy for implementation where labour-based technology would play a central role (Ref. NTS 56.17):

"While almost all maintenance today is undertaken by one of the formally autonomous state or provincial enterprises, it is expected that a wide range of different types of work units will be needed:

- Equipment-based contractors (private or state-owned), operating across the country for heavy rehabilitation and improvement works, as well as for some periodic maintenance activities such as resealing. As recommended in Section 55, some of the existing state construction enterprises could supplement the existing state maintenance enterprises for these tasks;
- o Smaller, regionally based contractors (private or state-owned) with a mix of labour and equipment, for periodic maintenance and for routine maintenance in some areas;
- o Small provincial force account units for emergency repairs and possibly routine maintenance, or to supervise contracted staff or villages for labour-based maintenance. These may be based on existing provincial enterprises."

It should be noted that this strategy, as described in the NTS, also provides a sound approach to the intentions of the current Public Investment Programme to develop the private sector construction and maintenance capabilities.