EXECUTIVE SUMMARY

The provision of adequate infrastructure, along with macroeconomic stability and a long-term development strategy, is one of the necessary conditions for sustainable economic and social development. However, in a number of countries of the ESCAP region, power brown-outs or black-outs, traffic congestion in major cities, limited road access to provincial markets and capitals, long waiting times at major ports, inadequate telecommunications services, including long waiting lists for telephones, and shortages of irrigation, drinking and industrial water all bear witness to the inadequacy of existing infrastructure facilities.

Partially in response to such observations and in recognition of the vital role which infrastructure plays in economic development, the Commission at its forty-ninth session, held in Bangkok in April 1993, decided that the theme for its fiftieth session would be "infrastructure development as key to economic growth and regional economic cooperation" and directed the secretariat to undertake a study on this topic.

The study found that by the year 2000, electrical generating capacity in the region as a whole needed to be doubled, main line telephone connections increased by 184 per cent and an extra two million kilometres of roads (a large proportion of which would be rural roads) constructed.

In the area of the financial resource requirements, the main finding of the study was that between 1993 and the year 2000, around $1,400 billion would be required for infrastructure development in the developing countries of the ESCAP region. Of the total, $500 billion was identified as available or already committed. Consequently, the financial "gap" amounts to around $900 billion. This, however, is most likely an understatement as, for example, detailed cost estimates for rehabilitation work were not included.

To place those estimates in perspective, the total amount required to fill the gap is approximately equal to the combined gross national product (GNP) of China, India and the Republic of Korea in 1991. It is also more than 40 times the GNP of Bangladesh. In relation to the international lending agencies, the combined lending in 1992 of the World Bank and the Asian Development Bank was around $27 billion, of which around $7.5 billion was for transport, telecommunications, energy, urbanization and water supply and sanitation in countries of the ESCAP region. If similar amounts were lent each year to the year 2000 it would amount to significantly less than ten per cent of the identified additional financial resource requirement.

In the light of these observations, it is unlikely that sufficient funds will be found from external sources to assist in closing the estimated gap. Consequently, measures in the areas of improving administration and efficiency, and mobilizing additional domestic resources need to be adopted.

In the administration of infrastructure facilities, typical obstacles include overt and bureaucratic regulation. This is manifested in the regulation of prices, controls on maintenance and investment decisions, inability of enterprises to retain profits, responsibility for the provision of various welfare services and facilities, lack of public sector funds for investment and an inability to attract or retain qualified staff. These issues and obstacles need to be addressed so that infrastructure facilities can be operated more effectively.

Cross-country and sensitivity analyses show that significant improvements can be made in the operating efficiency of infrastructure facilities, thereby significantly reducing the infrastructure financing requirement. Similarly, the neglected maintenance of existing assets has seriously impacted the effectiveness with which these assets can be used and imposed higher long-run capital costs.

The lack of planning and coordination of infrastructure development has compounded some of the shortages being experienced. Many ministries and departments are involved in the decision-making process and inadequate physical land-use planning and even non-compliance with established plans have led to duplication and, more frequently, "missing links" which limit the output of one investment through a failure to provide other supporting infrastructure.

For many of the region's countries the main source of funds for infrastructure development is, and will

1 ESCAP, Annual Report (E/1993/36, E/ESCAP/927), paras 532 and 533.
continue to be domestic finance. In this respect, there is appreciable room for greater tax efforts, in particular, the current degrees of buoyancy and elasticity of the tax system can be much enhanced through a judicious widening and deepening of the tax base. Fiscal instruments can be better designed and innovations, such as value added taxation, can be more widely introduced in accordance with the available administrative capabilities. Moreover, the assignment of additional resources to minimize tax avoidance and ensure greater compliance will likely yield high returns.

It also appears possible to raise non-tax revenue, rationalize demand, improve delivery efficiency and enhance equity of access through higher fees for infrastructure users or charges on beneficiaries across a wide range of infrastructure facilities and services. This would be consistent with self-financing of infrastructure projects.

The encouragement of a greater involvement by the private sector in infrastructure development is a feature of current policies in a number of countries of the region. In many cases, this represents a solution to some of the problems arising in infrastructure development, including the provision of funds from outside the government budget, implementation of efficiency measures and transfer of technology and management know-how. For some countries, however, it has been difficult to attract the private sector. In this respect, the key policy issue which needs to be addressed is the creation of a favourable climate for private sector participation. Such a “climate” is multidimensional and includes the ability of the country’s legal system to accommodate and facilitate both domestic and foreign private sector participation, the Government's administrative procedures in relation to the formation and operation of private organizations and the general macroeconomic stability of the country.

In the case of the least developed countries, there is a clear need for the international community to continue providing support. In many cases, this will require a reassessment of long-term strategies for sustainable development so that donors and recipients can work together towards this end.

For the disadvantaged economies in transition and economies which have recently emerged from periods of extended civil strife, there is a major rehabilitation and reconstruction task at hand, which also demands the attention of the international community.

For many countries of the region, especially the land-locked countries, the provision of an efficient transport system is essential for the development of a country's trade. This requires a number of different modes of transport, transit through third countries and across borders. The very nature of these requirements dictates that a regional, integrated systems approach is adopted towards the development of infrastructure, multimodal transport, transit arrangements and facilitation of border crossings. Similarly, the joint development of infrastructure projects can be mutually beneficial to the countries concerned and, for example, in the power sector, can provide the basis for further economic development.

There are considerable differences in the stages of economic development which countries of the region have reached, and many countries have adopted different approaches to the provision of infrastructure facilities. Consequently, there is a firm basis for the sharing and comparing of experiences in infrastructure development and mutual assistance in human resources development through regional economic cooperation.

It would appear that by the end of the century there will still be a considerable shortfall in infrastructure capacity. To minimize the impact of this, the majority of initiatives need to be taken at the national level in terms of improving the efficiency of existing systems, mobilizing domestic resources through improved fiscal measures, self-financing and creating the environment for the private sector to contribute to the development process. To this end, a number of recommendations have been made for action at the country level and supportive action at the regional level.

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2 Various forms of value added taxation have been introduced in several countries of the region.