## UNITED NATIONS DEVELOPMENT PROGRAMME





Distr.
GENERAL
DP/PROJECTS/REC/10<sup>1/</sup>
5 April 1982

ORIGINAL: ENGLISH

GOVERNING COUNCIL Special meeting 24-28 May 1982, Geneva Agenda item 3(d)

COUNTRY AND INTERCOUNTRY PROGRAMMES AND PROJECTS

CONSIDERATION AND APPROVAL OF COUNTRY PROGRAMMES (INCLUDING REQUESTS FOR EXTENSIONS) AND PROJECTS

Project recommendation of the Administrator

Assistance to the Government of Viet Nam

Repair and Maintenance of Diesel Locomotives (VIE/80/054)

Estimated Government contribution expressed in US dollars:

158,333

Estimated UNDP contribution:

US\$ 2,000,000

Duration:

Two years

US\$

Executing Agency:

United Nations

Government Co-operating Agency:

General Department of Viet Nam Railways

## I. Background

1. Viet Nam's physical configuration is long and narrow, with the northern and southern regions playing quite different economic roles. They are complementary and dependent on each other for the country's development. The south has a surplus of agricultural products and produces important light industrial goods, while the north has the coal, minerals, and fertilizer necessary for power production, industry and agriculture in the south. These regions, therefore, need to be linked by an efficient transport system.

<sup>1/</sup>The previous UNDP project recommendations were issued under the symbols DP/PROJECTS/R.1/Add. 1-3 through DP/PROJECTS/R.14/Add.1-6.

- 2. Of the possible means of transport, air has a very restricted capacity for passengers as well as for freight, and may not be cost-efficient in the latter case. Coastal shipping, which could be a major means of domestic transport, is also restricted due mainly to a lack of suitable ships and inadequate harbours. The principal harbours are devoted largely to import and export trade. Road transport is limited to feeder operations in view of the long distances and comparatively high fuel costs. In recognition of this, the basic policy of the Government is that transport within provinces is by road, while transport between provinces, wherever possible, is by railway.
- 3. Railways therefore constitute the only dependable means of the internal transport system. The principal line runs from Ho Chi Minh City to Hanoi (1730 kms.), from whence lines run to Haiphong, Lang Son (to the northeast, on the Chinese border) and to Lao Cay (up the Red River valley to the northwest, also on the Chinese border). The line running north from Ho Chi Minh City to Loc Ninh in the rubber-producing province of Song Be was badly damaged during the war and has not been restored to service.
- 4. The administration of the railways is divided into three geographical divisions. The First Division (from Vinh northwards) relies principally on 155 steam and 45 diesel locomotives. There is a workshop for the steam locomotives at Gia Lam near Hanoi. The Second Division (Vinh to Qui Nhon) has 30 Romanian 900 h/p locomotives and, starting in 1983, will receive sixteen 1800 h/p dieselelectric locomotives from Belgium. A workshop is to be established at either Vinh or Da Nang. The Third Division (from Qui Nhon southwards) is the weakest in terms of locomotive power; of its 61 locomotives, only 12 to 14 are operational. It is not feasible to transfer any of the steam locomotives from the North, as they are too heavy for the bridges in the Centre and South.
- 5. The Government has therefore requested UNDP assistance to develop the capacity to rehabilitate the locomotive fleet and concurrently to carry out on-the-job training in the preventive maintenance and repair of diesel locomotives in the Chi Hoa Workshop of the Third Division in the South.
- 6. At the end of November 1981, a mission composed of a staff specialist and a consultant from the United Nations Department of Technical Co-operation for Development visited Viet Nam to evaluate the requirements for UNDP assistance in the light of the existing conditions and to assist the Government in the formulation of a draft project proposal.

## II. The project

7. The immediate objective of the project is to assist the Government in strengthening the capacity of the Third Division, by improving the programme of preventive maintenance and by conducting on-the-job training of technical and engineering personnel in the course of restoring some 26 diesel locomotives. The project, once operational, will train 100 workers in preventive maintenance

procedures as well as certain heavy repair work. The project's output is therefore the provision of a technically sound base for preventive maintenance. This base will also serve the application of future capital input necessary to keep the locomotives operational on a long-term basis.

- 8. The major project activities required to produce the output mentioned above are as follows:
- (a) Preparatory assistance: A mission of two technicians has been undertaken as indicated above to define the scope of the project and its principal objectives;
- (b) Engineering survey: A survey will be conducted to provide recommendations for the improvement of the maintenance procedures for each of the major components of diesel-electric locomotives. A detailed list will be drawn up for replacement parts and materials needed for the improvement of the workshop and for the restoration of locomotives;
- (c) Project management, technical advice and consultancy services: A Chief Technical Adviser, a number of short-term specialized consultants and a subcontractor will: ensure effective management and execution of the project activities; monitor the progress of the work involved; provide the necessary technical advice to national technical personnel; provide advice on locomotive preventive maintenance procedures; and develop on-the-job training programmes covering the operation of workshop equipment and the restoration of diesel engines, related mechanical equipment and electrical components. In addition, limited training abroad will be arranged in all aspects of diesel-electric locomotive repair and maintenance, as well as a study tour in workshop layout and management;
- (d) Equipment and supplies: The Government will furnish replacement parts, tools and other materials purchased locally valued at an estimated 1,710,000 Dong (\$US equivalent 158,333). It will also provide workshop buildings and equipment, project offices, the necessary administrative support services and local transport. UNDP will be requested to provide additional workshop equipment, supplies and replacement parts which are not available locally, and which will be required to restore the workshop and some 26 locomotives. The equipment recommended by the mission covers only the essential requirements for the operation of the project and does not provide for the total refitting of the locomotives concerned. The mission believes that the equipment component contains only what is not available locally, is essential to make the project operational, and can be effectively utilized, taking into account the constraints on local facilities and qualified manpower.
- 9. The project has a good mix of advisory services and training of national staff. There are four elements of advisory services: the Chief Technical Advisor, who will oversee the project for its entire duration; provision for different short-term specialized consultancy services; and two subcontractor engineering surveys covering the diesel and electrical components. There are also four

training elements: local on-the-job training to upgrade a variety of technicians, including 70 diesel engine mechanics and 20 electrical fitters; overseas training for two graduate engineers; a study tour for three senior workshop staff; and the training of a further number of Vietnamese mechanics by means of a subcontract with an overseas locomotive workshop.

10. The Government is in a position to supply the necessary counterpart personnel, including workshop managers, engineers and other technical staff. Therefore, this particular assistance constitutes a necessary facility for training in new techniques which are not otherwise available to the Government. In addition, UNDP resources will be utilized to provide much needed and important infrastructure without which economic and social development are greatly hampered.

## 11. The components of the proposed UNDP contribution are as follows:

	M/M			<u>US\$</u>	
Personnel Subcontract Training Equipment Miscellaneous	28	Total	1 2	625	000 000 000 000 000