

occurred on an ad-hoc basis. Recent commitments by the IFI's to contribute to the rehabilitation of the infrastructure are key to future project work in the country.

Vietnam's geography necessitates the use of different modes of transport from inland water transport in the delta regions to road and rail for land transportation. The renovation and reconstruction of existing road, rail, port and air facilities will be essential if Vietnam wishes to meet its economic goal to attract foreign investment.

The Ministry of Transport and Communications (MOTC) is responsible for all sectors of transportation with the exception of civil aviation, which is under the jurisdiction of the General Civil Aviation Administration (CAAV). Both work within budgets established by the State Planning Committee, which allocates the overall country resources. In addition, the Committee of External Relations with Foreign Countries controls external financial assistance which is often a requirement for many large infrastructure initiatives.

Since the largest constraint facing infrastructure development is the lack of domestic financing, projects will need large amounts of external assistance from foreign sources. Overall, the construction and maintenance capabilities are insufficient; assistance and training will be required in organization and management, technology transfer, and training of the work force.

Roads

Vietnam's road network consists of approximately 115,000 km of roads at various levels. There is 10,000 km of asphalt-surfaced road with widths up to 7 metres, without shoulders, while the remaining 105,000 km is single track, unsurfaced, with a width of 3.5 metres. Sixty percent of the highways and roads urgently require reconstruction.

In southern Vietnam, many roads are adequate due to the large wartime investment by the US in the 1960s. Roads such as the Bien Hoa Highway, the Vung Tau Route, and Route 4 from Ho Chi Minh City to Can Tho, which is located in the centre of the Mekong Delta, have been maintained in relatively good condition.

Roads are becoming damaged as the use of cars and trucks become prevalent. There are about 200,000 registered vehicles in Vietnam and over one million motorcycles. All cars and trucks are imported. The capacity of most trucks ranges from five to eight tonnes.

Rail

The rail network consists of 2,530 km of single-track line covering six main routes. The longest route is 1,726 km between Hanoi and Ho Chi Minh City, known as Route 1. Route 2 is from Hanoi to Lao Cai covering 296 km, Route 3 is from Hanoi to Dong Dang covering 162 km, Route 4 is from Hanoi to Quan Trieu covering 75 km, Route 5 is from Hanoi to Haiphong Port covering 102 km, and Route 6 is from Luu Xa via Kep to Bai Cay covering 166 km.

There are three rail track types in Vietnam: 166 km of standard gauge track (1,435 mm), 2,124 km of metre gauge track (1,000 mm), and 237 km of dual gauge track, which uses both gauges. There is also 750 km of branch lines maintained by 260 stations.

Vietnam has a total of 480 locomotives with only 50 percent in working condition. In addition, 100 are operating as steam-driven engines. The government will eventually phase out the steam engines.