Development and Issues of Freight Movement in East Asia Summary for Presentation at PIARC TC2.4 Burkina Faso Meeting

Yoshi Imanishi, President

Public Planning & Policy Studies, Inc.

In Japan the development of modern road network had begun via the high- economic growth period of 1945-2000. The majority of Japan's social infrastructure such as road network and high-speed railroads were rapidly constructed during this period. After 2000, Japan's economy has entered a maturation period and its growth rate has been low since. Service sector has become dominant in the industrial structure. Freight volume has been increasing throughout the high-economic development period, however, it is now stable or starting to decrease due to the change in industrial structure.

Rail had been the principal mode in freight transport, however, it is now the principal mode for passenger transport. Marin transport has stabled despite the changes in other modes and is used for long distance transport of heavy items. Road, on the other hand, has gained its share in freight transport to a large extent accompanied by the increase in freight volume and advancement of freight transport such as Just-in-Time delivery. In recent years, road has stabled in freight modal share and is in a maturity state. Japan is promoting the development of ring roads and motorway networks, however, the progress of these developments have been sluggish due to the greater awareness of environmental issues.

The focus of Japan's road policy has shifted to transport demand management as it continues to construct new roads. However, it is difficult to fully implement effective transport demand management measures because roads in Japan are physically inadequate to implement such measures, i.e., most of them are 2-lane.

In contrast, countries of continental regions such as China show extraordinary economic growth. In China, economic activities concentrated in the coastal regions, however, a number of enterprises have relocated their production bases to inland areas where labor costs are cheaper. As a result, the freight volume of inland regions and coastal regions as well as freight to overseas and via ports has been increasing. Marine transport is the dominant mode of freight transport in China, and the country's total freight volume has been growing without showing a significant change in the modal share. In order to support the economic repercussion from the coastal regions towards inland regions, China promotes the development of motorway network. For instance, inland bound freight transport that used Yangzi River will be switched to road transport, since the River is contaminated and the railway capacity is not sufficient.

Economic growth in East Asian countries reveals the tendency that in line with the economic growth, the marine transport maintains its status as a significant mode of freight transport yet changing its role, and rail transport loses its share in modal share while road transport gains it. Freight measures shift their focus on developing ports and railways to motorways. Subsequently, freight measures shifts from those that concentrate on the infrastructure development to the transport management measures such as congestion mitigation, safety, and environmental improvements.

From studying the trends in East Asian region, one can learn that the effective freight measures to avoid over-reliance on road transport should be implemented while water and rail transport remain as the major mode of freight transport. The physical structure of road networks should also be developed in a manner that will allow full implementation of transport demand management measures in the future.