

The Comprehensive Development Review (CDR) for Yemen

Building Block- Transport Sector

I. Introduction

1.1 The objective of the CDR is to serve as a framework for macro and sector policy, institutional development and public expenditure rationalization. For this purpose, four lenses that link specific issues of this building block to poverty have been proposed. These are growth/ income distribution, risk/ vulnerability, and delivery of essential services and voice/ transparency/ accountability. Consistent with the main goal of the CDR, the Transport Building Block provides a tool to monitor progress and the impact of the Bank's, the Government's and other organizations' efforts to eliminate poverty, as a core measure of development effectiveness.

1.2 Yemen is one of the poorest countries in the world with a GDP per capita of about USD 320. In 1992, the rural population below the poverty line was 19.2 % while in urban areas the figure was 18.6%. In global terms, 19.1% of the population of Yemen is under the poverty line. However, subsequent economic reverses and cuts in consumption subsidies increased this rate to 25% in 1998.

II. Overview of Indicators

2.1 A set of indicators has been identified that can be used to monitor the impact of transport sector development on poverty elimination. Data for benchmarking of some of these indicators come from a survey of about 360 rural settlements conducted by the Yemen Road Fund Board (YRFB) for the design of a rural access strategy. The data include information on access to markets, to health care facilities, to schools, to the primary road network and to public transport service. Information regarding the type of vehicles and their corresponding number as well as the type of access road to the settlement is also available. These attributes of accessibility and mobility are indicators that strongly correlate with the level of development and poverty of human communities in general and of personal welfare in particular.

2.2 Accessibility to workplace and basic infrastructure services (i.e., schools, health care, etc.) are among the principal components of personal welfare. Since income affects travel behavior, less trips per person, longer travel times and slower and less convenient modes of transport are associated with lower personal or household incomes. The lack of adequate mobility in terms of the availability of public transport services and private cars restrict the social and economic activities of residents, mainly among the poor and those living in rural areas. For this category of individuals, many of their activities are constrained to those within walking distances, which in many cases are very long and not possible for some groups of the population such as children, women and the elderly.

2.3 Improvements in transport not only provide people with more convenient access to a broad range of socio- economic activities, but also have strong income effects by lowering

transport cost and hence, the prices of consumer goods and services. Thus, transport has a direct contribution to poverty alleviation.

2.4 The primary transport sector in Yemen is road transport, and far the largest effort of the Government of Yemen to improve the transport sector has been in the area of road transport. The primary road network in Yemen is currently about 9400 km, including about 7200 km of asphalt roads and 2000 km of gravel roads. Of the asphalt paved roads, about 5300 km are rural inter- district roads and some 1900 km are urban roads. In addition, there are about 57,000 km of track roads. About 55 % of the primary road network is in fair to poor condition and is in need of strengthening and rehabilitation. Both passenger and freight transportation are primarily dependent on road transport. A large percentage of the road traffic consists of trucks.

A. Public Capital Expenditure on Transport

2.5 This indicator, expressed as the total amount of capital expenditure in the road and transport sectors per 1000 people for a particular year, is important because of the strong correlation that exists between economic growth, public expenditures and poverty alleviation. Whenever possible, this indicator should be expressed separately for expenditures in the road and transport sector in rural as well as in urban areas. The total road sector budget in Yemen in 1998 was about USD 100 million. Thus, a gross estimate of the capital expenditure in the road sector per 1000 people was about USD 6500 in 1998. For expenditures in rural areas, the corresponding value is about one third of that nationwide. Regarding the total maintenance expenditure of roads per 1000 people it was in the order of USD 6500 in 1997, but decreased to half of this amount in 1998. As a result, the average expenditure in maintenance per kilometer of the primary road network decreased to about USD 1100.

B. Vehicle Ownership, Travel and Safety

2.6 Vehicle ownership can be tracked by monitoring the motorization rate (number of vehicles per 1000 people). This rate in Yemen was 53 in 1997. Another indicator is the number of motor vehicles per kilometer of road. This indicator had a value of 15 in 1997. The growth in vehicular fleet has been about 6% per year since 1985. The number of passenger cars per 1000 people has almost doubled since 1980. The number of vehicle- kilometers of travel per 1000 people can be an indicator of personal mobility. The number of vehicle- kilometers of travel in Yemen increased from about 1.25 billion in 1980 to 11.50 billion in 1997 (other estimates are in the range of 30 to 42 billion vehicle- kilometers per annum). In 1997, the number of vehicle- kilometers of travel per 1000 people was about 0.77 million. The level of personal safety is another indicator and can be represented as the rate of people killed and/ or injured in road accidents per 1000 vehicles. Most of road accidents involve pedestrians, the majority of whom are among the poor of the population and have walking as their main means of transport. The number of people injured or killed in traffic related accidents per 1000 vehicles was about 15 in Yemen in 1997.

2.7 In rural areas, the number of passenger cars represents a small percentage of the vehicular fleet, while pick-ups and 4x4 vehicles represent the greatest percentage. The number of trucks is very small also. The type of vehicles used give an indication of the level of personal mobility, of the level of local production and of the type of roads. The higher number of pick-ups and 4x4 vehicles is a result in most of the cases of the lack of a paved access road to the settlement and the long distances connecting these settlements with the nearest paved two-lane highway. Moreover, their larger ownership compared to light and heavy trucks is an indicator of the small scale of production, mainly from the agriculture sector. Although pick-ups could be used for the transport of passengers, this type of vehicles is primarily used for the transport of agricultural products.

C. Public Transportation

2.8 The poor segment of the population in any society is dependent on public transport. The availability and the quality of public transport service indicates the level of mobility and accessibility experienced by the poor. The number of buses per one million people could be an indicator of these levels. The number of buses is about 3000 in Yemen, resulting in an indicator value of about 175 buses per one million people. However, public transport in rural areas is not available and the distance between rural settlements and the closest public transit route is not within walking distance and in many cases exceeds five kilometers. The lack of public transport services has confined the poorest among the poor population to live in ghettos without access to basic social services and markets. Thus, because the rural population has little choice of modes other than walking, they have to spend a large amount of time and energy that could be used for activities that would raise their living standards.

D. Access to Schools

2.9 An appropriate indicator would be the average travel time to reach primary and secondary schools. At present, walking is the main transport means in Yemen to reach schools. One way walking distances of about 2.0 km (about 40 minutes of travel time) have been reported in the YRFB survey. The lack of access of students for motorized modes of transport or non-motorized modes other than walking have had a major impact on the enrollment of students in schools. In 1997, gross primary school enrollment was about 72% in Yemen. For the same reason, it had an impact on the recruitment of teachers and consequently, on the quality of teaching being provided. The impact has been more severe on the females than on males. Of the primary school enrollment, only 50% of the females that are supposed to be enrolled were attending schools compared to 93% of males. The lack of adequate transport access to schools is among the main factors responsible for the high illiteracy rate (% population age above 15 years) in Yemen, which overall reached 56% and among women 76% in 1997. These rates are higher in rural areas, where about 65% of the total population of Yemen lives. The 1994 census reported only 24% of rural girls attending schools. The education of females is the best way to improve their status. Thus, integration of special requirements of women into the design of projects should be considered for the provision of public transport in rural areas.

E. Access to Health Care Services

2.10 Average travel time to health care services is another indicator of the role of road infrastructure and transport services on the quality of life. In Yemen, only 55% of its 17 million population have access to medical services. Low-income levels and an inefficient transport system are among the main reasons for this low level of accessibility, which is even higher in rural areas. In rural areas, walking is the main mode when human settlements include some form of health care. However, motorized transport is the main access mode when health care facilities are not available nearby. Since cars are available to a limited number of persons in the rural communities and public transport is almost non-existing. The inhabitants of rural communities have very limited access to health care facilities. Thus, the high rates of infant mortality and maternal mortality in the rural areas of Yemen could be indirectly linked to this lack of adequate transport accessibility. This is consistent with the belief that most direct poverty targeted interventions (schools, health clinics and social services) depend on transport as a complementary input for their effective delivery.

F. Access to Markets

2.11 Average travel time to markets is a an indicator of the economic well being of a community. Access to markets could be by those buying consumer goods or by those selling their produce. Because of the lack of public transport and the relatively long travel distances separating villages from markets, which make walking infeasible, private vehicles are at present the only means for residents of rural areas to access markets. However, there are only a very few vehicles available in a village and the cost of using them are relatively high.

G. Road Infrastructure

2.12 There are several indicators that can be used to represent the extent and condition of road infrastructure, such as kilometers of paved roads per 1000 people, kilometers of rural roads per 1000 people. In Yemen, the rates corresponding to these indicators are about 0.45 and 0.35, respectively. Another indicator is the percentage of primary roads in good condition, which was 45% in Yemen 1997. In Yemen, less of 10% of the total road network is paved and does not reach a large portion of the population, which lives in small rural settlements in rough terrain. Most of the rural road network is in poor or very poor condition, depriving a considerable portion of the rural population from participation in the market economy and access to vital services. In addition, about 21% of the primary road network (about 2000 km) is severely damaged, requiring immediate attention. These factors have held back the development of markets and discouraged private business investments.

III. Strengths and Weaknesses in the Data

3.1 Specific data on transport behavior of the poor are very limited because of the lack of detailed household travel surveys and systematic surveys targeting the poor in rural areas. With the exception of the survey conducted by the YRFB, transport surveys when conducted are for main cities, which do not reflect the transport problem of the poor and do not capture the effect it has on their welfare. Information necessary to assess the constraints imposed by transport on poverty alleviation has been given high priority by the Government of Yemen and the Bank. Data consistency is another issue to be addressed. Data that are not currently available are related to passenger travel and freight transport. In general, data regarding travel time, road infrastructure stock, public transport ridership, percentage of transport services in the private sector, among other, are not available.

IV. International Comparisons

4.1 A review of the 1999 World Development Indicators reveals that Yemen has the lowest percentage of paved roads in its network in the Middle East. Only few countries in Africa have similar characteristics as Niger and Rwanda. Table 1 includes a comparison of some indicators related to the road and transport sector between Yemen and other countries in the region (Lebanon and Tunisia). In order to guarantee consistency, only Bank's data and for the year 1997 were considered.

4.2 The number of kilometers of paved roads per 1000 population in Lebanon and Tunisia is about four and three fold of that in Yemen, respectively. Similarly, Yemen has the lowest motorization rates among these countries with about 53 vehicles per each 1000 people. The mobility indicator, the number of vehicle- kilometers of travel/ per 1000 people, is four times in Lebanon and two times in Tunisia than the corresponding value in Yemen. Significant differences can also be found in the provision of public transport services in these countries. The number of buses available in Lebanon and Tunisia per 1000 people is 10 and 2.5 times the corresponding number in Yemen, respectively.

Table 1: International Comparison of Transport Indicators

Parameters and Indicators	Yemen	Tunisia	Lebanon
Land Area (in square kilometers)	528,000	155,360	10,230
Population (in thousands)	16,100	9,200	4,100
Expenditures on Roads (in USD)	100,000,000	82,070,000	16,030,000
Buses	3,000	4,600	7,984
Trucks	154,000	16,402	13,758
Light Commercial Vehicles	126,000	192,485	45,889
Cars	565,000	418,749	715,620
Paved Roads (in kilometers)	7,200	11,720	8,402
Total Roads	57,000	17,770	21,999
Total Motor Vehicles	848,000	632,236	783,251
Total VKT	11,500,000,000	12,500,000,000	12,305,560,000
VKT/ 1000 people	714,286	1,355,666	3,001,356
Expenditures on Roads/ 1000 people	6,211	8,921	3,909
VKT/ 1000 vehicles	13,561,321	19,734,385	15,715,913
Kilometers of paved road/ 1000 people	0.45	1.27	2.05
Kilometer of Paved Roads/ 1000 square kilometers	13.64	75.44	821.3
Motor Vehicles/ 1000 people	52.7	68.7	191
Passenger Cars/ 1000 people	35	45.5	174
Buses/ 1000 people	0.19	0.5	1.95
Trucks & Light Com. Vehicles/ 1000 people	17.39	22.7	14.5

V. Role of the Transport Sector in Yemen's Broader Development- Poverty Reduction

5.1 As is the case worldwide, there is a need in Yemen to strengthen the direct role of transport interventions in poverty alleviation and development. With this into consideration, the Transport Sector Building Block examines the role of the transport sector in Yemen's broader development- poverty reduction efforts within four lenses. These are discussed in the following paragraphs and include growth/ income distribution, risk/ vulnerability, delivery of essential services, and voice/ transparency/ accountability.

A. Growth/ Income Distribution

5.2 The North's mountainous geography contributed to centuries of relative isolation from the outside world and continues to keep people deprived from the accessibility to markets and basic services. About 85% of the population of Yemen are in the highlands and rural areas, where the major activity is agriculture. In contrast, the eastern areas are more open to the world and their inhabitants enjoy relatively higher income levels. The availability of transport and road infrastructure has played a vital role in the distribution of income and population.

5.3 The shortage of water in the highlands and the high cost that would be incurred to transport water from the coastal areas to the highlands has caused Yemen to target future growth in the coastal areas rather than in the highlands. Yemen's location along the major sea route between Europe and Asia can foster this growth. The Seaport of Aden could become a major growth pole. Thus, there is a need to improve the transport service and road infrastructure in both the highlands and rural areas as well as in the coastal areas.

5.4 Annual population growth is high at about 3.34%, and the population of Yemen is expected to increase from about 17 million in 1999 to about 36 million in the year 2025. About 48 % of the total population is currently under the age of 14 years and soon will enter the active labor force. However, job opportunities are scarce due to the lack of investment and over-regulation, including those activities related to the transport sector. Unemployment is currently at about 30%. This high rate is indirectly linked to the inefficient Yemeni transport system and would increase if this system were not improved to encourage local and foreign developers to invest in the country. Investment in road infrastructure, particularly in rural areas, would create new economic opportunities and sources of income and probably, reduce the prices of goods as a result of lower costs of transport of raw materials to production centers and the delivery of final products to consumers.

B. Risk / Vulnerability

5.5 In Yemen, there is a strong traditional social safety net of charitable support for the very poor as well as strong social relations.

5.6 More recently, however, traditional sources of support and stability are under threat due to rapid urbanization, as urban migrants leave stable rural social structures for less socially supportive urban ones. The average annual growth rate of urban population has been about 7.3% during the last 20 years. Despite this high urbanization rate, there is no urban agglomeration in Yemen with a population exceeding one million inhabitants. The Yemeni rural population is distributed among more than 100,000 human settlements, making the provision of adequate infrastructure (including that related to the transport sector) and services costly. The provision of public transport in these areas is just one example of the difficulties faced by the transport sector.

5.7 Internally, the unification of South Yemen and North Yemen in 1990 not only brought on the difficult task of integrating two different social systems (a tribal north and a socialist south), but also two transport systems and two broad categories of road users of relatively different characteristics. Despite the effort made by the Government of Yemen to foster development and improve the transport system, it still has a weak capacity to implement programs, enforce laws and provide security. The 1994 civil war, which resulted in an estimated loss equivalent to three years of GDP, resulted in serious damages to its transport infrastructure.

5.8 Externally, the expulsion of about 0.8 million Yemeni workers from the Arab countries in the Gulf following the Gulf War reduced workers' remittances to one third (from a total of about USD 1.6 billion). In addition, annual economic aid from the USA and Arab states in the Gulf decreased considerably. Also, major financial assistance from socialist countries ended with the collapse of the Soviet Union. All these factors decreased the resources available for the improvement of the transport system as well as for creating new investment opportunities that would indirectly result in poverty alleviation. In this regard, the political and economic relations with Saudi Arabia, because of the Gulf war and border disputes between them, remain uneasy at considerable cost for both Yemeni producers and traders. The amount of Yemen's exports decreased from about USD 2.0 billion in 1995 to about USD 1.5 billion in 1998. Crude oil exports represented about 88 % and 81 % of the total amount in these years, respectively. These external stocks have had major impacts on the extent and depth of poverty.

5.9 The provision of road infrastructure and transport services and its impact on poverty reduction in Yemen is also vulnerable to periodic floods and the level of maintenance provided. In general, there is a need to improve the sustainability of the road network by increasing annual maintenance expenditures to a level which will prevent further erosion of road assets (estimated at YR 4.10 billion per annum).

5.10 The transport sector and its role in poverty alleviation have also been vulnerable to the Yemeni over-dependence on oil exports. This over-dependence largely obscured the need for export diversification until the collapse of oil prices in 1997. Over 90% of export revenue came

from oil revenue. However, unless major new oil reserves are discovered, the quantity of oil exported will begin to fall by about 2002. Unfortunately, the skills, markets and infrastructure (including those related to the transport sector) for other exports will take many years to develop and would have an effect in poverty reduction in Yemen.

5.11 With the sharp fall of oil prices in 1997, the government made deep cuts in untargeted diesel subsidies in 1998, affecting the cost of transport and the prices of consumer products. Further weakening of world oil prices or major increases in world grain prices (the main imported good which amounted 2.2 million tons in 1992) could force further cutbacks in budget outlays and subsidies.

C. Delivery of Transport Services

5.12 Public transport is not available in rural areas, but only in the larger cities. This has deprived the inhabitants in rural areas from access to markets, services and job opportunities and consequently, affected their income. In this regard, the improvement of rural access has been defined as one of the priorities for both the Bank and the Yemeni Government. In the northern cities, public transport service is provided by mini buses called 'dhabar', which have designated routes, but somewhat erratic timetables. In contrast, public transport service in southern cities is more regular.

5.13 In the trucking industry, there is controlled pricing for essential commodities and free market for other types of commodities. Trucking cartels 'Ferzah' have caused transport costs for non-controlled commodities to be two to three times over economically efficient levels. These cartels have been cited as a major deterrent to private sector investment. In the case of essential commodities, overloading of trucks occurs frequently due to the tariffs being set too low. This behavior has had a negative impact on the road network by causing excessive pavement and road damage and frequent accidents.

5.14 The importance of the efficient delivery of transport services in poverty alleviation is directly reflected in three out of four of the objectives of the Country Assistance Program (CAS) formulated in 1998 by the Government of Yemen and the Bank. These are:

- To create a modern public administration that provides public services honestly and efficiently while encouraging private enterprise.
- To attract diversified productive private investments that help the economy out of poverty and dependence on oil. Without any doubt, the transport sector and the provision of adequate transport services and infrastructure is imperative to achieve this objective. This would have impacts in the cost of production, delivery and the prices at which products are sold in the markets for the general public.
- To create an early stream of social benefits, in education, health and other services which directly address poverty. It was discussed above how the lack in provision of adequate

transport services and infrastructure had a negative impact in the levels of accessibility to education, health care services and markets, mainly in rural areas and among the poor.

5.15 Thus, the Government of Yemen should encourage the participation of the private sector in the provision of transport services. In this regard, cost recovery for transport service providers should be an important issue to be addressed and the government can have a critical role to play by providing incentives and facilitating licensing.

D. Voice/ Transparency/ Accountability

5.16 The government adopted a program of stabilization, structural adjustment and social protection in mid- 1995. Among its elements was trade reform. As a result, traders face a simpler and less protective tariff structure which now incorporates all imports fees into one rate and fewer import bans, export restrictions and trade licensing requirements. Another measure by the government was to adopt a uniform treatment of both domestic and foreign investors and to encourage privatization. About 30 public enterprises in industry, tourism and trade have been privatized. Although it is a small step and its direct effects on the reduction of poverty are not immediate and to a large scale, it is considered an important long-term measure. The most serious constraints on potential investors have been the excessive presence of the government in some areas (inefficient public enterprise monopolies, over- regulation) and its weakness in others (justice, banking regulation, information). In the transport sector there is still a risk that the government's capacity to implement reforms maybe lacking.

5.17 The organization of the road sector is in a process of transition with different functions being transferred from one institution to another. While some of these institutions are already in operation, others are still in the formulation and development process. Another issue is that many public organizations, including some autonomous public institutions, are involved in the road and transport sector with no clear definition of responsibilities.

5.18 The efforts of the government has been assessed by the Operations Evaluation Department (OED) review of the Bank's assistance to Yemen in the road and transport sector. The OED concluded that 100% of the evaluated projects were seen as likely to have sustainable benefits and institutional development was reasonably good. An autonomous road maintenance fund (RMF) has been created and the commercialization of the government owned construction agency GCRB is now effective, which now competes with private contractors. Thus, the management of the transport sector is good. This is important as one of the government's priorities is to extend and maintain the road network as a key element of nation building and consequently, of poverty reduction.

5.19 Unfortunately, mechanisms for the poor to voice their transport needs are almost non existent. Thus, public participation and community empowerment should be made possible in the transport planning process, in the implementation of projects and in the maintenance of infrastructure. This would be a direct measure of how local residents could participate in

improving their welfare as they would be engaged in the provision of better levels of accessibility to markets, services and new job opportunities.

VI. Transport Development Goals and Prospects

6.1 Development of transport infrastructure has always been a priority of the Government's given the need to integrate and administer a vast territory whose unification was only completed in the early 1990's. Traditionally, Yemeni society did not encourage or emphasize access, and consequently transport development in Yemen faces an even more difficult challenge than is the case in most developing countries. In fact, the geography of human settlements in Yemen appears to be intentionally designed to render access more difficult.

A. Government's Goals in the Transport Sector

6.2 By the year 2020, the Government intends to transform the economic geography of Yemen through development of a modern transportation system that allows people in all parts of the country to participate fully in the national economy. Presently, that is not the case for those living in isolated settlements in rural areas, for those parts of the country remote from Sana'a or Aden, or even for those living in urban areas but lacking private means of transport. The Government's long-term (20 years) goals for the transport sector may therefore be set out as follows:

- Establish all-weather access to each classified human settlement so that it may be reached by motorized transport within at most an hour's drive from the classified road network.
- Develop affordable public transport services, provided by self-financed private sector firms, connecting all major urban centers and to neighboring countries.
- Implement a regional highway network connecting Yemen's highway system to those of the neighboring countries of Oman and Saudi Arabia.
- Exploit Aden Port's location on international shipping routes to develop a world-class cargo transshipment hub and a trading and industrial complex to provide increased economic opportunities for Yemeni workers.
- Develop a self-sustaining Civil Aviation sector able to generate financial surpluses by providing on-route services to international over-flight traffic crossing Yemeni air-space and modern facilities for Yemen's domestic and international airline traffic.

6.3 In support of these longer-term goals, the Government has adopted a Medium-term (5-Year) program for the transport sector as follows:

- Develop and implement a rationalized expenditure program for the rural road network so as to permit completion of projects within a reasonable implementation period and within available annual budgets of around YR 2 to 3 billion (constant 1998 Yemeni Rials).
- Eliminate the maintenance back-log of the road network and achieve a sustainable system of road maintenance financing by introducing effective cost recovery systems and appropriate road user charges which generates about YR 4.1 billion (1998 YR) per annum in revenues from road users.
- Institute reforms in the passenger transport sector and privatize operations so as to remove regulatory impediments to the provision of efficient and cost-effective services.
- Reform the regulatory framework governing the Port of Aden to remove distortions such as now exist with respect to ship agency, ship repair and other shipping services, and allow a more competitive environment in the operations of the port.
- Formulate and implement a comprehensive civil aviation policy and provide facilities that meet ICAO requirements, particularly safety requirements, at the country's airports.

B. Prospects for the Achievement of Medium-Term Transport Sector Goals

6.4 Achievement of the medium term goals set out above are well within the reach of the Government in view of various actions already initiated. In the rural roads sector, the Government's program for development of the gravel road network has been considerably rationalized with the total number of active projects being reduced from over 250 to less than 200. Achievement of increased cost recovery and sustainable maintenance funding in the road sector has been partially achieved with the establishment of the Road Maintenance Fund and gasoline surcharge. The new regulatory framework in the trucking sector will introduce weight/distance tariffs for trucks, (see below) and will thus achieve cost recovery in the trucking sector which so far has not contributed to road maintenance funding. This should also help eliminate the maintenance back-log by increasing the funding available for road maintenance works. In the passenger transport sector, Government has identified the General Land Transport Corporation as a public sector entity to be privatized; however, progress has been slow due to the need to resolve issues surrounding surplus labor and to fund expensive severance payments. Port reforms in Aden are well advanced with the award of a private sector concession to operate the new transshipment terminal, but here again there have been difficulties related to surplus ship agency labor and the private sector companies that took over the ship agency role are looking to the Government to resolve the problem. In the civil aviation sector, the Government is initiating the Civil Aviation Policy study and is actively considering ending the ground handling monopoly granted to Yemenia, the national flag airline. Privatization of Yemenia is also being considered.

VII. Key Issues for Transport in the Medium-Term

7.1 In order to achieve the objectives the Government has set for itself over the next five years, a number of issues will need to be resolved. Primarily these relate to mobilization of resources in the transport sector and to ensuring that available resources are allocated to the highest priority needs, and to developing the related institutional capacity in the sector. The key issues confronting the Government are listed below:

A. Establishing the General Land Transport Authority (GLTA)

7.2 The GLTA is to be established as part of the strategy for dismantling the cartel arrangements in the trucking sector, the Ferzah, and in addition would include a system for collecting weight/distance tariffs from loaded trucks to fund road maintenance. This will be a critical factor in achieving a self-sustaining funding mechanism for the road sector, and will also be critical to the functioning of the Yemen Road Fund Board, which is the key institutional mechanism for planning and budgeting in the road sector.

B. Rationalization of Rural Road Development Program

7.3 The present rural road program in Yemen is dysfunctional due to a proliferation of projects that cannot be fully funded under existing budget constraints. Consequently, funds are wasted on projects which do not get completed for many years, and often expenditures made in previous years are lost when incomplete works are washed away due to lack of proper drainage structures. Rationalization of the rural road program will require the development of proper planning processes and project selection criteria without which the program lacks transparency and cannot be defended against the ad hoc dictates of various powerful interest groups.

C. Private Participation in Public Transport Development

7.4 Presently, the General Land Transport Corporation is entrusted with providing all public transport services with the exception of small minibuses operated by the private sector in the larger cities such as Sana'a and Aden. This has constrained the development of a private passenger transport industry in Yemen. In most areas outside of the major cities, the only effective means of transport is by private car or shared taxis, neither of which provides an affordable transport mode for the poorer segments of Yemeni society. Reform of the public transport sector is long overdue and is recognized by the Government as necessary. However, since such reforms will inevitably result in the loss of public sector jobs at GLTC, which would either be privatized or liquidated, the Government has been reluctant to engage in any serious reforms until provisions can be made for the GLTC workers who would become redundant.

D. Redundancy Payments for Surplus Public Sector Employees

7.5 As in the case of GLTC, a number of transport sector para-statals cannot be reformed without putting in place adequate mechanisms for the disposition of redundant workers. This is true in the ports, in the road sector, the Yemen National Shipping Line, the Civil Aviation and Meteorological Authority and Yemenia - the national airline. Funding for severance payments is needed to transfer these workers to the Government's pension system, and while the amounts involved are generally not large, they need to be included in the budgets of concerned Ministries.

7.6 The monitoring indicators specified for the transport sector include ones that track the above issues so as to provide a means of assessing on a regular basis the resolution of these issues.

VIII. Public Expenditures Options for Relieving the Constraints

8.1 If oil prices continue to decrease, there are several options for Yemen to restore funding for the transport sector. The first is increased cost recovery, which may prove politically difficult in a constrained economy. The second is to provide additional donor funding over three to four years to allow continued support for maintenance while increased cost recovery mechanisms are phased in gradually. The third is to enhance privatization. Sharply increased cost recovery from YR 0.8 billion per annum to YR 3.0 billion per annum by FY 2000 is not likely to be politically feasible. In FY 2000 an expenditure program of YR 13.8 billion is required. A weight/ distance tariff on truck freight movements, has been proposed and could generate about YR1-2 billion. Other forms of cost recovery considered to a less extent, include road tolls and vehicles fees.

A. Privatization

8.2 It was mentioned earlier in this report that private participation has been considered as one of the key issues for the transport sector in the medium term. Privatization through the relaxation of Government's ownership and regulation of the transport sector and the replacement of monopolies with competition is an important public option for relieving the constraints it faces in the management and development of the transport system in an attempt to reduce poverty in Yemen.

8.3 The Government of Yemen has prepared a Land Transport Law that will provide well-defined investment opportunities to private companies in the transport sector. This law will open transport markets to competition and in particular, will remove constraints to competition in freight markets. As a result, the Ferzah would be dismantled and truck drivers and employees would be assisted through a welfare support program. In this regard, there is also an intention by the Government to establish the General Land Transport Authority to replace the freight monopoly Ferzah.

8.4 A new Privatization Law was recently passed by the Parliament. The privatization of Yemen Shipping Company has been completed and the Yemeni Ministry of Transport is interested in privatizing or leasing out Malla Terminal in the Seaport of Aden. Another five privatization transactions in the transport sector are in progress. These are for the Yemen Navigation Lines, the Aden Dockyards Company, the new Seaport of Nashtun, and the General Corporation for Land Transport. Plans are being developed to privatize ground and cargo handling services in Yemen's six international airports in the current year of 2000 when the ground-handling contract of Yemenia expires. Privatization of the National Shipping Agency (Natship) has already been accomplished. However, some privatization has resulted in monopoly, as is the case of the seven private shipping agents that have taken over in the Seaport of Aden and operate as a consortium. The issue of existing labor force is complicating privatization. Another issue to be guaranteed by the government is the provision of adequate security in the area in order to attract contractors and private investors.

B. Cost Recovery

8.5 The option is to improve the efficiency of road transport by implementing a phased program to achieve full cost recovery from road users within 5 years by identifying non-budgetary financial resources. Among the measures are the following:

- Increase the surcharge on gasoline from YR 0.5 to YR 1.0 per liter for the FY 2000 and thereafter. This would yield YR 1.4 billion per annum for the Road Maintenance Fund.
- Road user charges could be increased to improve cost recovery from road users. The proposed General Land Transport Authority would have the power for the collection and financial management of weight/distance road user fees to be charged by freight forwarders on every shipment by road and the deposit of these charges into the Road Maintenance Fund. No less than YR 1.0 billion could be generated for the RMF for the FY 2001.

8.6 Introducing weight/ distance tariffs may face some political obstacles for its implementation. In addition, it would require adequate monitoring to avoid going back to the previous practice of overloading when the freight industry was over-regulated by the government, which accelerated pavement and road deterioration. For this purpose, there is a proposal to establish a computerized Pavement Management System and extend its coverage to all paved roads in the country. There is also an initial agreement to fund a set of mobile weighing pads for the RMF axle load control. In general, a ton-km charge is easy to collect and administer, and difficult to evade.

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