Chapter 1 Background of the Project

The Syrian Arab Republic (hereinafter referred to as "the Syrian Government") is located in the eastern coast of the Mediterranean sea, bounded on the north by Turkey, on the east by Iraq, on the south by Israel and Jordan and on the west by Lebanon and the Mediterranean sea. The total area of the Syrian Government is 185 thousand square kilometers of which 60 thousand square kilometers are cultivated land and the remaining area is desert and rocky mountain. The population is 14.9 million in 1997. Gross National Product (GNP) per capita is around 1,120 US dollars.

The climate and geographic features are varied in the regions. The coastal region in northwestern part of the country is characterized by heavy rainfall in winter, a moderate temperature and high relative humidity in summer, and the land is very productive. The interior region in eastern part of the country is a desert area and characterized by a small amount of rainfall in all seasons, with hot and dry in summer. The mountainous region runs from the midsection to the south of the country. The mountains are nearly 3,000m height above sea level along the Jordanian border. Areas with altitude of 1,000 meters or more are characterized by more than 1,000mm of rainfall in winter and moderate climate in summer.

Agriculture sector was the traditional major industry and accounted for more than 20 percent of Gross Domestic Product (GDP) in 1996. Mining and manufacturing sector accounted for 27 percent of GDP due to increasing oil production that was growing up as key industry recently. As these sectors are influenced by the climate or by fluctuations of the oil price, it is difficult to maintain stability of the economy in the country. Service sectors, accounted for more than 50 percent of GDP, are contributing to the economy of the country due to increasing investments and the introduction of foreign capital. Every agriculture, mining and manufacturing, and service sectors are well balanced with the others, not single industry.

The rural province of Damascus located in the south of the country and surrounds Damascus city, the capital of Syria, is currently being developed as residential area of Damascus city. The population is rapidly growing due to inflow migrants to Damascus city. Inhabitants in the rural region are facing serious drinking water shortage because surface water, like rivers or lakes, is insufficient and underground water is also limited in the region. Underground water is over-pumped and its water level is gone down owing to the increasing population and water shortage. Shallow wells in the regions are contaminated by the urbanization around towns with the possibility of an outbreak of cholera. Inhabitants in the rural province moved to Damascus city to get clean water. As a result, population in

Damascus city is increasing and agriculture production in the rural province is decreasing.

Under these conditions, the Syrian Government took actions to rehabilitate and construct water distribution network for improving water supply condition in residential areas. However, due to the lack of foreign exchange, necessary equipment and materials of the water supply facility could not purchased. Hence, the construction and rehabilitation of these facilities have been suspended.

In the view of the above circumstance, the Syrian Government requested for Japan's Grant Aid assistance to procure the equipment and materials as "the Project for Water Supply Development in the Rural Province of Damascus" (hereinafter referred to as "Phase I project") in 1994. Service areas of the Phase I project were 9 districts located northeastern of Damascus city. These districts except one, where water source has not been decided, were studied in detail. Equipment and materials were procured in 1996. The construction works were completed in 1998.

The Syrian Government again made a request for Japan's Grant Aid assistance to solve the problem of the remaining district.

This project deals with remaining 4 districts or those excluded from Phase I Project as Daraya, Moadamiya, Sehnaya and Ashrafia in western Ghoutah. Population of four districts was 160,000 in 1994 and will be 247,000 in 2005. The population growth rate is approximately 4 percent. Therefore water supply and expansion of supply facilities are urgently needed. The Syrian Government has found new water source in Rima area, approximately 35km far from Damascus city, and the application for Grand Aid assistance was submitted in 1997. Japan International Cooperation Agency (hereinafter referred to as "JICA") sent field survey mission of the basic design study in August, 1998.

As a result of field survey, only 5 out of 13 existing wells in Rima area could be used. The project was suspended until the Syrian Government should dig four new wells because the water source should be prepared by the Syrian Government. After the Syrian Government completed to dig wells and to test water quality of four wells by July, 1999, the Project was resumed and JICA send the mission for implementation review and explanation of the draft report in February, 2000.

The aim of the project is to procure equipment and materials for and to construct the water supply facilities in order to supply safe and stable water to 4 districts in western Ghoutah.