

Ex-ante Evaluation (for Japanese ODA Loan)

1. Name of the Project (country)

Country: Kingdom of Morocco

Project: Fez and Meknes Regions Water Supply Project

Loan Agreement: July 29, 2011

Loan Amount: 17,440 million yen

Borrower: Office National de l' Eau Potable

2. Background and Necessity of the Project

(1) Current State and Issues of the Water Supply Sector in Morocco

In Morocco, since more than 80% of the annual precipitation of 140 billion m³ is lost for evaporation, the available water volume is limited to 16.9 billion m³, and securing and management of water resources are priority issues in view of development. With regard to the water supply sector in Morocco, the rate of water supply has been steadily increased through the measures taken in the past, and the coverage reaches 100% in the urban areas and 87% in the rural areas (2008). However, it is still urgently required to improve the facilities in order to realize stable supply in response to increased water demand due to the spread of water supply connection to each household, population growth, improvement of living standards, etc. in the urban and rural areas.

(2) Development Policies for the Water Supply Sector in Morocco and the Priority of the Project

In Morocco, priority development targets are indicated in “the Budget Act” that is developed each year. With regard to the water supply sector, the Budget Act of FY2010 emphasizes the improvement of water supply facilities dealing with the increasing demand of water supply and the improvement of the water-supply rate itself in the rural areas as a measure linking to the improvement of the health conditions, school attendance rate. A new national policy has been developed for the period of 2009-2030, which aims at improving water accessibility especially in rural areas and at protecting the water resources. Furthermore, improvement of accessibility to basic social services including water supply is incorporated in “the National Initiative for Human Development (2006-2010)” which was introduced under the leadership of the King in 2005. The Moroccan Government developed “Government Action Plan on Water Sector (2008-2012)”, which aims at sustainable development of water supply facilities in urban areas, as well as improvement of the water accessibility in rural areas. Based on these policies, the National Office of Potable Water (ONEP) intends to increase the water supply amount by enhancing the existing facilities and developing the new facilities, to enlarge the water supply service to rural areas and to diffuse the water supply connection to each household in urban and rural areas, etc in line with the Project Plan (2008-2010), which was established between ONEP and the Government of Morocco. This project is prioritized in this project plan and will contribute to stabilizing the water supply in local cities and rural villages in Fez and Meknes, improving the living environment of local people and activating the economic activities.

(3) Japan and JICA's Support Policy and Achievement in the Water Supply Sector

Regarding the water supply sector, Japan has assisted 7 projects for urban and rural water supply by ODA Loan (amounting to 58.1 billion yen), and 5 projects for rural water supply (amounting to 2.5 billion yen) by Grant Aid. This project is intended to assist further efforts to promote and stabilize water supply in

Morocco, which is consistent with “Assistance to the basic infrastructure development supporting sustainable economic growth”, which is one of the priority issues of Japan’s economical support to Morocco as well as “Securing and efficient use of water resources”, which is the development issue. Furthermore, this project is also expected to have 2.3 million beneficiaries and contributes to the “TICAD IV Yokohama Action Plan” which defines “providing safe drinking water to 6.5 million people”.. Therefore, JICA’s aid for the project is highly necessary and relevant.

(4) Other Donors’ Activities

The French Development Agency (AFD), Kreditanstalt für Wiederaufbau(KfW), the World Bank, the European Union and the African Development Bank among others are assisting in the water supply sector in Morocco,

(5) Necessity of the Project

The project is intended to take measures for the increase of water demand as stated above. This project also coincides with Japan’s priority areas of assistance Therefore, it is highly necessary and relevant to implement this project.

3. Project Description

(1) Project Objective(s)

The objective of the project is to promote water supply facilities to supply water to Fez and Meknes and the neighboring villages in north-central Morocco and to improve the water supply capacity in these areas, thereby contributing to improvement of the living environment of the residents and revitalization of economic activities.

(2) Project Site/Target Area: Fez and Meknes Regions (the both local cities and the neighboring villages)

(3) Project Outline (including the procurement method): To construct water supply facilities (purification plants treating 2,000 ℓ/second), water intake facilities, pumping stations and reservoir facilities and to install aqueducts/water conveyance pipes (total length approximately 93km) in those areas.

- Engineering works, procurement of materials and equipment (international competitive bidding)
- Consulting services (assistance for bidding, management of construction) (the short list system)

(4) Total Project Cost

Total Project Cost: 24,262 million yen (ODA loan amount: 17,440 million yen)

(5) Project Schedule (period of cooperation)

July 2011 – December 2014 (42 months)

The project is defined as being completed when the facilities are made available for operation (December 2014).

(6) Project Implementation Structure

- 1) Borrower: Office National de l’Eau Potable (ONEP)
- 2) Guarantor: The Government of the Kingdom of Morocco
- 3) Executing Agency: ONEP
- 4) Operation and Maintenance System: Department of the ONEP in charge of each target regions

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

- 1) Environmental and Social Consideration

- (i) **Category: B**
 - (ii) **Reason for Categorization:** This project is not located in an area which is likely to be affected or a sensitive area under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002) and is not considered to have any significant adverse impact on the environment. For this reason, the project is classified as Category B.
 - (iii) **Environmental Permit:** Preparation of an Environmental Impact Assessment (EIA) for this project is not obligatory under Moroccan domestic law, but it has been already prepared for the local cities in Fez/Meknes and neighboring villages.
 - (iv) **Anti-Pollution Measures:** Sludge generated from operation of purification plants will be dried and then disposed appropriately as waste. Drained wastewater will be recycled. Construction works will be executed considering noise, vibration and air pollution.
 - (v) **Natural Environment:** The project area is not in or near areas that are sensitive to impact such as national parks, and so undesirable impact on the natural environment is assumed to be minimal.
 - (vi) **Social Environment:** This project is expected to involve land acquisition, and the procedures will be taken in accordance with Moroccan domestic procedures. There will be no resident relocation.
 - (vii) **Other/Monitoring:** The ONEP will monitor wastewater drainage, sludge, and water quality among others.
- 2) **Promotion of Poverty Reduction:** None
- 3) **Promotion of Social Development** (gender perspective, measure for infectious diseases including AIDS, participatory development, consideration for persons with disabilities, etc.):
It is expected to improve the sanitary environment and to reduce labor of water drawing, etc. by strengthening the water purification/supply facilities by ensuring safe water supply permanently.
- (8) Collaboration with Other Donors:** The Islamic Development Bank is providing loan for part of the facilities to be developed.
- (9) Other Important Issues:** None

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Indicator		Baseline (Actual value in 2010)	Target (2016, 2 years after completion)
Water generation volume (m ³ /day)	Fez	285,120	324,000
	Meknes	93,312	208,051
Population subject to water supply (,000)	Fez	City	1,072
		Village	70
		Sub-total	1,142
	Meknes	City	664
		Village	308
		Sub-total	972
Grand-total		2,114	2,307
Operating ratio of the new purification plants	(Average)	-	43%
	(Peak time)	-	56%

2) Internal Rate of Return: 14%

Cost: Project cost, operation and maintenance expenses (excluding taxes)

Benefit: Reduction of the water drawing labor

Project life: 40 years

(2) Qualitative Effects

The project will contribute to improve the living environment of the areas, to develop economic activities, and to secure water resources through preservation of groundwater resources.

5. External Factors and Risk Control

None

6. Lessons Learned from Findings of Similar Projects Undertaken in the Past

In the Ex-post evaluations of existing water supply projects of Morocco of the past, it is described that “a change of project plan shall require additional procedure and result in project delay”. For this project, the feasibility study (F/S) has been already established and the implementation status of detailed design (D/D) has been discussed repeatedly with the executing agency. The project plan and the actual performance shall be continuously monitored while the project is under implementation.

7. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(i) Water generation volume (m³/day)

(ii) Population subject to water supply (,000)

(iii) Economic internal rate of return (%)

(iv) Operating ratio of the new purification plant (average) (peak time)

(2) **Timing of Next Evaluation:** Two years after completion of the project