

The Hashemite Kingdom of Jordan

FY 2017 Ex-Post Evaluation of Japanese ODA Loan Project

“Fiscal and Public Service Reform Development Policy Loan”

External Evaluator: Takeshi Daimon, Waseda University

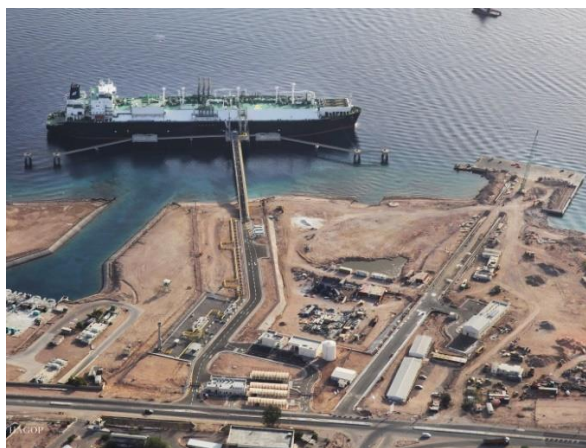
0. Summary

This project aimed to build capacity of public debt management and improve public services (electricity and water) by supporting policy reforms in the fields of public debt management and public services (electricity and water), thereby contributing to stabilize the economic growth of Jordan. The project has been highly relevant to Jordan’s development policy and needs as well as Japan’s ODA policy, and the project planning and approach have been overall appropriate. The implementation of the project helped improve debt management capacity and issuance of sukuk bonds to diversify funding sources. It introduced a cost recovery mechanism in the electricity sector to reduce debt in electricity company, and thus the effectiveness is high. In addition, it has reduced the burden for deficit subsidy for electricity sector and partially contributed to the stabilization of the macroeconomy. Some degree of impact has also been realized, through such contributions as reducing environmental burden by utilizing liquid natural gas (hereinafter, “LNG”). Therefore, the project has generated certain effects so its effectiveness and impact are high.

1. Project Description



Project Location (Entire Jordan)



LNG Terminal (Aqaba)

1.1 Background

Jordan is surrounded by Syria, Iraq, Saudi Arabia, Israel and Palestine, and is very sensitive to the Middle Eastern situation. In particular, since 2010, it has been affected by the Syrian crisis.

As of 2015, according to the United Nations High Commissioner for Refugees¹ (hereinafter, “UNHCR”), Jordan had approximately 620 thousand Syrian refugees. On the other hand, it has established diplomatic relations with Israel, and while receiving active economic assistance from the United States, played an intermediary role with Palestine, assuming a geopolitically important role.

Economically, Jordan depends highly on investments from abroad or tourism revenue; therefore, it is influenced by the situation in surrounding countries and petroleum prices, and its economic structure is vulnerable to external factors. Since the 2008 world financial crisis, the Arab Spring in the beginning of 2011, and decline in trade due to the Syrian conflict, the economic growth rates have depressed from 8% level in 2004 to 2007 to 2% to 3% since 2010. In this context, to maintain public services (water, electricity, and so on) for the huge influx of Syrian refugees, the budget balance has worsened, reaching over 11% of GDP in 2013. In addition, public debt has worsened since 2008 due to the slowdown of economic growth, increase in budget deficit, and financial problems of the National Electric Power Company (hereinafter, “NEPCO”), reaching 89% of GDP in 2014.

To initiate financial consolidation, the Government of Jordan signed the Stand-by Agreement with the International Monetary Fund (hereinafter, “IMF”) in 2012, and has expanded donors’ assistance on budget support.

1.2 Project Outline

This project aimed to build capacity of public debt management and improve public services (electricity and water), by supporting policy reforms in public debt management and public services (electricity and water), thereby contributing to stabilize the economic growth of Jordan.

| | |
|--|---|
| Loan Approved Amount/ Disbursed Amount | 24,000 million yen / 23,976 million yen |
| Exchange of Notes Date/ Loan Agreement Signing Date | May 2015 / May 2015 |
| Terms and Conditions | Interest Rate 1.7% Repayment 25 years (Grace Period 7 years) Conditions for Procurement General Untied |
| Borrower/Executing Agency | The Government of the Hashemite Kingdom of Jordan/Ministry of Planning and International Cooperation (MOPIC) |
| Project Completion | December 2015 |
| Main Contractor (s) | - |
| Main Consultant (s) | - |
| Related Studies (Feasibility Studies, etc.) | N.A. |

¹ It is followed by Turkey and Lebanon in the number of Syrian refugees. Upon completion of refugee registration at UNHCR, the Syrian refugees are sent to refugee camps; however, more than eighty percent actually live outside these camps in Amman, Irbid, Mafraq, and so on (JICA provided materials).

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|------------------|---|
| Related Projects | <p>ODA Loan Projects “Fiscal Consolidation Development Policy Loan (March 2014)” “Financial Sector, Business Environment and Public Sector Service Reform Development Policy Loan (December 2016)”</p> <p>Technical Cooperation Projects Country Specific Training “Improvement of Public Debt Management” (January 2012 and March 2014) Technical Assistance related to ODA Loan, “Study on the Possibilities of Sukuk Issuance by the Government of Jordan” (September 2013 to March 2017) “Fiscal Management Expert” (September 2015 to September 2017) “Electric Power Policy Advisor” (September 2013 to March 2017) “The Project for the Study on Electricity Sector Master Plan” (October 2014 to March 2017) “Project for formulating Water Supply Plan for the Host Communities of Syrian Refugees” (December 2013 to May 2017)</p> <p>ODA Grant Aid Projects “The Program for Urgent Improvement of Water Sector for the Host Communities of Syrian Refugees in Northern Governorates” (March 2014) “The Program for Urgent Improvement of Water Sector for the Host Communities of Syrian Refugees in Northern Governorates (Phase 2)” (May 2017)</p> <p>World Bank “Development Policy Lending (DPL) I” (February 2012) “Development Policy Lending (DPL) II” (April 2014; co-financing with JICA)</p> <p>IMF “Stand-By Agreement”(SBA) (August 2012) “Extended Fund Facility” (August 2016)</p> |
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2. Outline of the Evaluation Study

2.1 External Evaluator

Takeshi Daimon, Waseda University

2.2 Duration of the Evaluation Study

This ex-post evaluation study was conducted with the following schedule:

Duration of the study: November 2017–January 2019

Duration of the field study: March 9–April 5, 2018; July 7–July 20, 2018

2.3 Constraints during the Evaluation Study

This project aimed to coordinate with multiple other donors and schemes, and to achieve effectiveness, it collaborated with the Islamic Private Development Corporation and Japanese financial institutions. Therefore, it is important to note the possible influence of relevant donors or other schemes in terms of the project’s effectiveness analysis.

Although efficiency of the project should be analyzed quantitatively by comparing inputs and output, this approach is difficult to conduct due to the characteristics of program typed loan project. In addition, only institutional aspect of sustainability, the implementing and monitoring mechanism of policy reform in particular, was analyzed in this ex-post evaluation. Thus no sub-rating was provided for efficiency and sustainability. Therefore, no overall rating was provided.

3. Results of the Evaluation

3.1 Relevance (Rating: ③²)

3.1.1 Consistency with the Development Plan

At the time of appraisal, the Government of Jordan was implementing its *National Agenda 2007-2017* for reforms, which aims to assure the international competitiveness as the long-term growth goal through improvement of the business environment, assurance of employment opportunities, and consolidation of the industrial base on the stable macroeconomic management. This project was based on the agenda and seven goals³ for the government action plans, under the *Government Work Plan 2013-2016* (hereinafter, “GWP”), supporting “fiscal and financial stabilization” and “modernization of public sector” that are consistent with the development policy of Jordan.

At the time of ex-post evaluation, *Jordan 2025 (2015-2025)* was the successor to *National Agenda 2007-2017* (renamed to “*National Agenda 2006-2015*”). Similar to the goals of *National Agenda 2006-2015*, stable macroeconomic management based growth scenario was envisaged in *Jordan 2025*. GWP (2013-2016), Executive Development Plan (hereinafter, “EDP”) (2016-2018) and *Jordan Economic Growth Plan* (hereinafter, “JEGP”) (2018-2022) are policies based on the upper 10-year plan, and consistently advocate fiscal discipline and improvement of quality of public services, recognized as consistent with the project. In Jordan, “fiscal and financial stabilization” and “modernization of public sector” are highly prioritized development policies, and this project has complied with the development policy.

3.1.2 Consistency with Development Needs

At the time of appraisal, the bankruptcy of Lehman Brothers in 2008, the Middle Eastern political turmoil since the end of 2010 “Arab Spring,” the decline in investment in EU after the Greek debt crisis, and so on, have led to lowered economic growth of 2.8% (2013) and 3.4%

² ③: High, ②: Fair, ①: Low

³ The seven goals include 1) fiscal and financial stabilization, 2) judicial and legislative consolidation, 3) modernization of public sector and human resources, 4) strengthening of knowledge-based economy, 5) improvement of investment environment, 6) promotion of rural development, 7) implementation of mega public private partnership (PPP) in energy, water, and transport sectors. (MOPIC provided materials.)

(2014).⁴ In addition, providing public services to Syrian refugees made it difficult to reduce budget expenditure, increasing subsidizing deficit to NEPCO, and contributing to the chronic budget deficit, which became -2.3% of GDP in 2014.⁵ Public debt reached 89.0% (2014) of GDP, in which domestic debt accounted for 57.5%, largely from the massive issuance of domestic bonds (paid out to domestic banks). Consequently, the increasing burden of public services, including electricity and water supply for Syrian refugees, the high cost of electricity generation due to the decline of LNG import for power generation from Egypt due to worsening of situation in the Middle East, and dependence on oil, all led to the structural factors of budget deficits to be improved, which require addressing policy issues in fiscal and budgetary services.

At the time of the ex-post evaluation, fiscal balance per GDP remained nearly the same in 2017 (-2.6%) compared to 2014 (-2.3%), as described in “3.3 Impact”; however, public debt per GDP worsened in 2017 (94.3%) compared to 2014 (89.0%). There remains high necessity for fiscal reform measures. The electricity tariff has reflected cost-recovery, as introduced in 2017, and the deficit has improved. In terms of energy savings, as NEPCO made a contract with one LNG supplier only, and water-saving measures are in the pipeline, sector reform is very necessary.

On the basis of above, the project has complied with the development needs of Jordan.

3.1.3 Consistency with Japan’s Development Policy

This project was consistent with “the maintenance of stability and development of industrial base,” “promotion of self-disciplined and continued growth,” “poverty alleviation and improvement of social disparity,” and “inter-regional communication towards the creation of peace” as advocated in the *Country Assistance Policy* (June 2012). Under this policy, *JICA’s Country Analysis Paper* (March 2015) also mentions, the “maintenance of stability and development of industrial base,” “promotion of self-disciplined and continued growth,” “poverty alleviation and improvement of social disparity,” and “inter-regional communication towards the creation of peace” as important support areas. Specifically, the policy promoted development policy planning and implementation, fiscal consolidation, employment promotion, and the stability of host community of Syrian refugees, and thus this project was considered consistent with these policies.

3.1.4 Appropriateness of the Project Plan and Approach

At the time of planning, this project was scheduled to be completed on the date of final disbursement (December 2015), while the period of assistance began from January 2015, before

⁴ According to JICA provided materials and Ministry of Finance.

⁵ Including grants, Ministry of Finance.

signing the loan agreement, to the end of 2017, or two years after project completion.⁶ When the Prime Minister Abe visited the Middle East in January 2015, he pledged 12 billion JPY as assistance, and upon a request of increase from Jordanian side, finally decided to extend 24 billion JPY. This increase due to policy considerations has no effect on policy items and the policy matrix of the project has been appropriate, logical, and rational, as assistance in terms of fiscal discipline, and electricity and water sector reforms, which were policy issues at the time of appraisal. In addition, the project aligned with the timing of policy reforms after the signing of the IMF Stand-by Agreement and the timing was appropriate for the assistance. Therefore, the project plan and approach were confirmed to be overall appropriate.

In light of the above, this project has been relevant to Jordan's development policy, development needs, and Japan's development policy, and the project plan and approach were overall appropriate. Therefore, its relevance is high.

3.2 Effectiveness⁷ (Rating: ③)

3.2.1 Effectiveness

3.2.1.1 Policy Action

This project was intended to improve 1) debt management and 2) public services (electricity and water sectors) and support continued reforms. To achieve policy objectives and effectively monitor progress, it was decided that, achievement of policy action I was confirmed at the time of appraisal, and the first disbursement was to be effectuated (June 2015) after signing the loan agreement (May 2015). The second disbursement was to be effectuated after policy action II was achieved. Concretely, the policy actions on the below (7 items) were conditional on the loan agreement. "Prior Action I" was achieved by the time of appraisal (January 2015) and achievement of "Prior Action II" was a condition for the second disbursement (December 2015). For this ex-post evaluation, the achievement of Prior Action II and the following progress were evaluated.⁸

(1) Public Debt Management Reform

① Improvement of Public Debt Management

(a) Prior Action I

Debt Management Tool Development Plan was approved (achieved by the time of appraisal)

⁶ According to JICA provided materials. It was planned to impart continuous technical cooperation, including dispatching experts, and so on, to achieve goals of policy reform after project completion

⁷ Sub-rating for effectiveness is to be put with consideration of Impacts.

⁸ Source: MOPIC

(b) Prior Action II

The issuance of debt management report, including future forecast, analysis, and stress test, extracted from data in debt management tool

(c) Achievement of Prior Action II

The debt management report FY 2015-2019 has been approved by the Minister of Finance and been submitted to JICA on December 9, 2015. In this sector, assistance was also provided by the United States Agency for International Development (hereinafter, “USAID”) and the World Bank. Therefore, the prior action II was considered to be achieved by December 2015.

② Diversification of Government Funding Sources

(a) Prior Action I

The FY 2015 Budget law, securing sukuk issuance, was submitted to the parliament (achieved by the time of appraisal).

(b) Prior Action II

FY 2016 Budget law submission to parliament, securing sukuk issuance

(c) Achievement of Prior Action II

On November 8, 2015, the cabinet approved the FY 2016 Budget, presupposing the issuance of sukuk, which was submitted to the parliament the same month. However, the sukuk was not issued until October 2016, before the second disbursement; however, the necessary budgeting had been made for the issuance beforehand; therefore, prior action II was considered to be achieved. As discussed in “3.2.1.2 Quantitative Effect,” one expert has been sent to the Ministry of Finance in the related field.

(2) Public Sector Service Reform

① Formulating Electricity Sector Long Term Plan

(a) Prior Action I

Signing R/D with JICA on the Electricity Sector Master Plan Project⁹ and selecting the steering committee (achieved by the time of appraisal).

(b) Prior Action II

Approval of the steering committee and the start of its activities

(c) Achievement of Prior Action II

On January 14, 2015, the list of Joint Coordinating Committee (JCC) equivalent to the steering committee was submitted to JICA, and the JCC was held in March and November 2015.

⁹ A detailed design study was conducted in August 2014, and JICA signed the Record of Discussion (R/D) with Jordan in October 2014.

Therefore, Prior Action II was considered to be achieved. Subsequently, in February 2017, the Master Plan was prepared with the assistance of JICA.¹⁰

② Deficit Improvement of NEPCO

(a) Prior Action I

Tariff was raised in 2014 (achieved by the time of appraisal)

(b) Prior Action II

Maintenance of increased tariff

(c) Achievement of Prior Action II

On July 4, 2013, the cabinet approved a tariff increase for 2013-2017 and the Prime Minister signed the cabinet decision. The raise in tariff was effectuated in 2014 and early 2015. However, in February 2015, the rate was reduced from the originally planned 15% to 7.5%. Therefore, it was necessary to follow up the tariff structure thereafter. Furthermore, upon advice by the IMF,¹¹ in January 2017, the Fuel Adjustment Clause Mechanism was introduced and the electricity tariff rationalized.¹²

③ Securing Alternative Fuels

(a) Prior Action I

Cabinet approval of sales and purchase agreement for LNG (achieved by the time of appraisal)

(b) Prior Action II

Completion of LNG terminal construction

(c) Achievement of Prior Action II

On December 14 2015, a letter signed by the Minister of Energy and Mining and submitted to MOPIC confirmed completion of LNG terminal construction. The LNG terminal is completed and operational (confirmed by the site visit). Therefore, Prior Action II is considered to be achieved.

④ Promotion of Energy Efficiency and Renewable Energy in Water Sector

(a) Prior Action I

The first draft plan for energy efficiency and renewable energy was submitted and approved (achieved by the time of appraisal)

¹⁰ Jordan, *Electricity Sector Master Plan*, JICA, 2017, Tokyo.

¹¹ IMF Press Release No.16/381, IMF, 2016, Washington

¹² p.34, footnote 22 says, "since January 2017, tariff has been adjusted automatically to allow cost recovery and loss was able to be avoided." (*Technical Assistance Report -Public Investment Management Assessment*, IMF, 2017, Washington)

(b) Prior Action II

Policy paper approval and securing the project budget

(c) Achievement of Prior Action II

On June 14, 2015, Prime Minister signed the budget reflecting the policy paper and priority projects for energy efficiency and renewable energy, and on October 21, 2015, the achievement of Prior Action II was confirmed after submission to MOPIC.

⑤ Reduction of Burden on Syrian Refugee Hosting Communities

(a) Prior Action I

A road map of the master plan for water sector facilities for the host communities of Syrian refugees in Northern governorates to be submitted and approved (achieved by the time of appraisal)

(b) Prior Action II

Proposal of priority project was drafted.

(c) Achievement of Prior Action II

On October 18, 2015, a letter signed by the Minister for Water and Irrigation was submitted to MOPIC with a proposal for priority projects. The letter's acceptance by the MOPIC on October 21, 2015 was considered an achievement of Prior Action II.

3.2.1.2 Quantitative Effects (Operation and Effect Indicators)

At the time of appraisal, the effect of policy actions was supposed to appear two years after project completion (end of 2017). Therefore, the target value of operation and effect indicators was set for the end of 2017 (after two years of project completion), and ex-post evaluation was to be conducted after two years of project completion.

As quantitative effects (operation and effect indicators), targets corresponding to the above policy actions were set. However, no specific numerical targets were set, and the achievement or failure of policy goals were working as targets.

Table 1 Quantitative Effects

| Policy Area/ Objectives | | Target (End 2017) | Achievement (End 2017) |
|-----------------------------------|---|---|---|
| Improve Debt Management Reform | Improvement of Public Debt Management | Issue a debt management quarterly report, including future forecast, analysis and stress test, extracted from data in debt management tool | The report has been s issued every quarter ¹³ |
| | Diversification of Government financing sources t | Issuance of sovereign sukuk | Issued on October 2016 ¹⁴ |
| Improve Public Service | Drafting of Electricity Sector Long-Term Plan | Approval of the Long Term Plan (Master Plan) by Electricity Regulatory Commission and its implementation and monitoring by NEPCO | Master Plan was formulated and approved by Electricity Regulatory Commission and its implementation and monitoring were confirmed to be conducted by NEPCO ¹⁵ |
| | Improvement of Deficit of NEPCO | Full implementation of tariff increase to eradicate NEPCO deficit | Electricity tariff has been rationalized through the introduction of Fuel Adjustment Clause Mechanism (January 2017). ¹⁶ |
| | Securing of Alternative Fuels | Staring of electricity generation by LNG | The LNG terminal is operational and generating electricity. NEPCO contracts with only one LNG supply company; therefore, it is desirable to expand the supply source for stable energy supply |
| | Promotion of Energy efficiency and Renewable energy in Water Sector | Energy saving project (at least one priority project) is completed, and renewable energy project (at least one priority project) has started. | Since 2015, one energy saving project has been completed, and key projects for renewable energy have been implemented ¹⁷ |
| | Reduction of Burden on Syrian Refugee Hosting Communities | Water Sector: projects corresponding to the plan (Master Plan) (at least one priority project) have been completed. | At least one priority project was implemented in Northern governorates. ¹⁸ |

Among the policy items, at the time of ex-post evaluation, “Fuel Adjustment Clause Mechanism” had been introduced in January 2017, which is related to deficit improvement of NEPCO; however, the actual increase in electricity tariff based on this mechanism did not occur until 2018. According to explanations by NEPCO, the international oil market was stable in 2017, and NEPCO registered positive operating revenues; however, as price hike in the international oil

¹³ Hearing from MOPIC (March 2018)

¹⁴ https://www.jica.go.jp/press/2016/20161017_01.html

¹⁵ Hearing from MOPIC and NEPCO (March 2018)

¹⁶ Above-mentioned IMF report and hearing from MOPIC and NEPCO (March 2018)

¹⁷ Hearing from MOPIC and Water Supply Corporation (WAJ) (March 2018) In this context, recycle energy is not limited to the water sector.

¹⁸ Hearing from MOPIC (March 2018)

market was expected for 2018, and inevitably, it was thought that the current tariff structure would result in deficits. In reality, NEPCO’s balance sheets for 2015 to 2017 (Table 2) show a deficit in 2015, and surplus in 2016 and 2017; however, finances have worsened since the latter half of 2017 and surplus reduced by approximately 75% of the previous year. Ignoring the situation would cause a deficit in 2018; therefore, in June 2018, the Fuel Adjustment Clause Mechanism was implemented and tariff was increased, except for small-scale households (using 300 kW/month or less).

Table 2 Financial Situation of NEPCO (Unit : million Jordanian Dinar (JD))

| | 2015 | 2016 | 2017 |
|-----------------------|-------|-------|-------|
| Operating Revenue | 1,507 | 1,469 | 1,478 |
| Operating Expenditure | 1,637 | 1,269 | 1,426 |
| Operating Profit | -131 | 200 | 51 |

Source : NEPCO Annual Reports and hearing from NEPCO

Now, the share of LNG per total power generation accounts for approximately 85% (2016¹⁹) . NEPCO contracts with Royal Dutch Shell for a daily average of 300 million cubic feet of LNG supply; ²⁰ LNG supply by two different types of contracts, one for long-term (fixed) sales of LNG and the other for spot market (variable price).²¹ In comparison to fixed price trading, the variable price allows the company to procure energy at the current market rate, and in this sense, saving costs; however, this is risky when market prices rise. The Ministry of Energy and Mining Resources, which regulates NEPCO, considers that for more stable procurement of energy, NEPCO should explore new market and suppliers and expand contracts with more than one company, and advises NEPCO when necessary in this matter.²²

Moreover, for effect of energy efficiency and renewable energy promotion in the water sector, the following progress has been reported for 2017.²³ First, pumping stations in Wala and Ribb were renovated, saving 535,075 JD in electricity in 2017. In addition, pumping stations in Bagri, Zaramain, and Dise were renovated, saving electricity. In addition, German Kreditanstalt für Wiederaufbau (hereinafter, “KfW”) has assisted in the modernization of Mafraq pumping station, to be completed during 2018, which supposes to use gravity to pump water rather than depending

¹⁹ *NEPCO Annual Report 2016*, NEPCO, 2017, Amman

²⁰ Hearing from NEPCO (July 2018) and *The Economist Intelligence Unit: Jordan*, 2015, London <http://country.eiu.com/article.aspx?articleid=1793602763&Country=Jordan&topic=Economy&subtopic=Forecast&subsubtopic=Policy+trends&u=1&pid=311536815&oid=311536815> (accessed November 2, 2018)

²¹ The spot market for electricity is one way of wholesale trading. The bidding for electricity prices occurs the day before, and the sales and purchases are matched.

²² Hearing from Ministry of Energy and Mining Resources

²³ *Action Plan to Reduce Water Sector Losses*, Ministry of Water Resources, 2018, Amman, and hearing from the same ministry.

on electricity once it completed. In addition, to reduce electricity costs for water supply the Water Corporation (hereinafter, “WAJ”) has launched a renewable energy project using wind power in Ma’an, with sales revenue in 2017 (8,539 million JD). In addition, to save costs in water supply, KfW, French Agency for Development (AFD), International Finance Corporation (IFC), among others, has supported the Bweda Solar Energy Power Plant (capacity of 200MW), which is currently under construction.

In addition, as grant assistance from Japan, the “Project for Rehabilitation and Expansion of the Water Networks in Balqa Governorate (Phase 2)” (signed in August 2017) (1,391 million yen) and the “Program for Urgent Improvement of Water Sector for the Host Communities of Syrian Refugees in Northern Governorates (Phase 2) (signed in May 2017) (2,412 million yen) are on-going, expected to further increase the effectiveness of the project.

To reduce the burden of hosting Syrian refugee communities, the above-mentioned grant aid projects by JICA (on-going) following the drinking and sewerage water master plan will renovate and expand water pipelines in Balqa Governorate, located in the North West of capital city Amman, rationalizing water supply pressure and reducing non-revenue rate, thus improving water services to compensate for the additional burden for water demand due to the influx of Syrian refugees. Furthermore, the grant aid project will renovate water distribution pipelines in the Hawwara community in Irbid, northern Jordan, which is experiencing a massive influx of Syrian refugees²⁴; thereby, further reducing the burden on host communities.

In addition, in November 2017, to complement the drinking water and sewerage sector master plan, KfW financed a 12.9 MW solar power plant in Zaataria Refugee Camp, saving some 6 million USD.²⁵ These savings means reducing the expenses of the host community on public goods/services, including water supply that entails electricity consumption, and meets the objectives of the master plan and reduces financial burdens on communities hosting Syrian refugees.

3.2.1.3 Qualitative Effects (Other Effects)

This project is intended to “improve budget deficit management through evaluating the past performance of improving the debt management capacity and supporting efficiency in the public service sector; thereby supporting development efforts of the Government of Jordan, aiming at macroeconomic stability”.²⁶ Qualitative effects including “improvement of fiscal discipline,” “enhancement of debt sustainability,” “improvement of public services (electricity and water),” and “reduced burden on Syrian refugee hosting communities,”²⁷ have been envisaged.

²⁴ Project Ex-ante-Evaluation Sheet

²⁵ *Jordan Fact Sheet February 2018*, UNHCR, 2018, Amman.

²⁶ Project Ex-ante-Evaluation Sheet.

²⁷ Ibid.

However, the effects on the aspects of stable macroeconomic management, improved fiscal discipline, enhanced debt sustainability, and reduced burden on Syrian refugee hosting communities are regarded as impacts rather than items of effectiveness at the time of ex-post evaluation.

For public services (electricity and water), the above mentioned “fuel adjustment clause mechanism” was introduced and improved NEPCO’s financial situation, and the construction of an LNG terminal made it possible to stabilize the electricity supply by diversifying the source of power generation. While the cost of water supply has increased due to the increase in the electricity tariff, the promotion of energy efficiency and renewable energy counterbalances the higher supply costs. However, water is directly linked to people’s daily lives, and it requires more political sensitivity in determining the tariff structure. Raising the water tariff to reflect the supply costs is more difficult than raising the electricity tariff. Therefore, WAJ’s financial circumstances tend to be influenced by non-economic efficiency factors, and in 2016, it registered an operating deficit of 351 million JD (per GDP minus 1.3% equivalent),²⁸ which makes it difficult to escape the deficit loop.

Objectively, while these effects are recognized, from interviews with NEPCO and WAJ, as this project is development policy lending and not project lending, causality is deemed non-existent between the project and more stable water and electricity. Unlike the Ministry of Finance, these agencies have not received experts, and the operational staff have limited knowledge about Japanese policy lending, which might have led to such a recognition.

²⁸ *IMF Country Report No. 17/231*, IMF, 2018, Washington

Column Support to the first issuance of sovereign *sukuk* in Jordan

In October 2016, the sovereign *sukuk* was issued for the first time for Jordan. Through this the Government of Jordan raised funds of 34 million JD (approximately 5 billion yen).

This project has been supported by “Study on the Possibilities of Sukuk Issuance by the Government of Jordan” (Technical Assistance related to ODA Loan) and actually assisted the issuance of *sukuk* (January 2015 to October 2016). Together with the Islamic Cooperation for the Development of Private Sector (hereinafter referred to as “ICD”), which is an affiliate of the Islamic Development Bank, JICA sent an expert to the Ministry of Finance and the Bank of Jordan²⁹. In addition, training was conducted in Sudan and Malaysia where the Islamic financial system is well-developed, which contributed to the effectiveness of the project. The issuance of the *sukuk* in Jordan has been praised by all ICD members as a model case in the Muslim economic sphere, earning it the Islamic Finance News Award in 2017. Further, after the issuance of the *sukuk* in October 2016, a “fiscal management expert” (September 2015 to September 2017) was appointed to the project and there have been various follow-ups to support the smooth implementation of reforms under the project.



Picture: Training in *sukuk* issuance at Sudan’s Khartoum Stock Exchange³⁰ (left) and at the ceremony for Islamic Finance News Awards (2017)³¹ (right) (Source: JICA)

3.2.2 Impacts

3.2.2.1 Intended Impacts

(1) Quantitative Effects

(a) Improvement of Fiscal Discipline

At the time of ex-post evaluation (2017), the budgetary condition shows that fiscal discipline has remained nearly the same, and the budget balance per GDP was not improved to the extent that the IMF predicted (-1.9%). Compared with the situation at the time of appraisal (2014), it

²⁹ Specifically, training of MOF staff in charge of issuance of *sukuk*.

<http://www.arabnews.com/economy/news/734386> Accessed August 20, 2018.

³⁰ JICA web site https://www.jica.go.jp/press/2016/20161017_01.html Accessed September 9, 2018.

³¹ JICA web site https://www.jica.go.jp/publication/mundi/1705/201705_04.html Accessed September 10, 2018.

has remained nearly the same in 2017 (-2.6%). (Table 3)

Table 3 Economic and Financial Indicators

| | Base Year (2014) | Completion Year (End 2015) | | Two Years After Completion (End 2017) | |
|--------------------------------|---------------------|-------------------------------|--------|---|--------|
| | | Foreca st | Actual | Forecast | Actual |
| GDP Growth (real%) | 3.4 | 4.0* | 2.6 | 4.5* | 2.1 |
| Budget balance (per GDP%) | ▲2.3 | ▲2.9 | ▲3.5 | ▲1.9* | ▲2.6 |
| Current balance (per GDP%) | ▲7.2 | ▲7.6 | ▲9.0 | ▲9.3* | ▲10.6 |
| Public debt (per GDP%) | 89.0 | 90.7 | 93.4 | 85.7* | 94.3 |

Source: IMF, World Bank, Ministry of Finance, Central Bank of Jordan and Department of Statistics data

Note: Forecast targets of GDP growth rate (2015) and all other fiscal indicators (*) are the ones at the monitoring mission (June 2014) for the IMF stand-by agreement (SBA).³²

Moreover, the quarterly reports show that the pre-project budget balance before 2015 was more than -20% of GDP, while the post-project period after 2015 shows less than -5%; and in the fourth quarter of 2017, the budget balance is nearly zero (-0.3%) (Figure 1).

This upward trend in the fiscal condition might indicate some improvement of fiscal discipline.

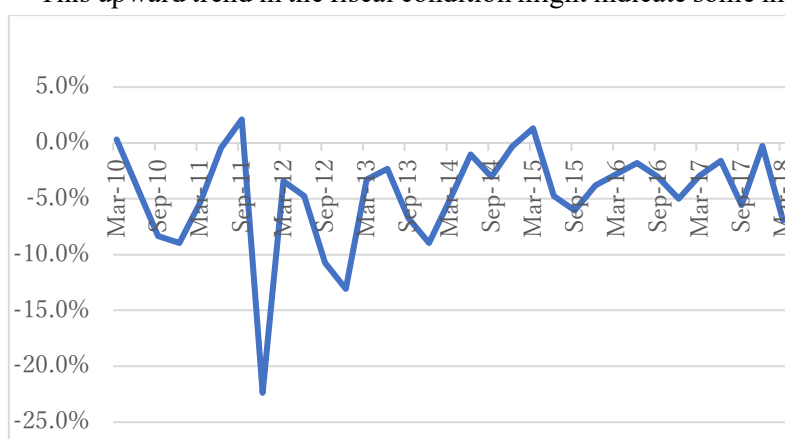


Figure 1 Quarterly Fiscal Balance per GDP (Unit: percent)

Source : Bank of Jordan

³² <http://www.imf.org/en/Publications/CR/Issues/2016/12/31/Jordan-Staff-Report-for-the-2014-Article-IV-Consultation-Third-and-Fourth-Reviews-Under-the-41615> Accessed September 10, 2018.

(b) Enhancement of Debt Sustainability

Public debt (stock base) per GDP worsened from 2014 (89.0%) to 2017 (94.3%). It was even higher than the IMF (2017) forecast of 85.7%. The slowdown of economic growth and deficit subsidy to WAJ might have contributed to the current status of not solving the public debt (stock base) drastically.

At the time of appraisal, the debt ratio was 65% domestic vs. 35% external (end of 2014), while at the time of ex-post evaluation (end of 2017), the figures were 56% and 44%, respectively (Figure 2)³³. It was initially feared that most domestic debts were purchased by domestic banks, leading to some degree of “crowding out”³⁴, but the issuance of *sukuk* allowed external fund raising contributing to the diversification of budget sources.

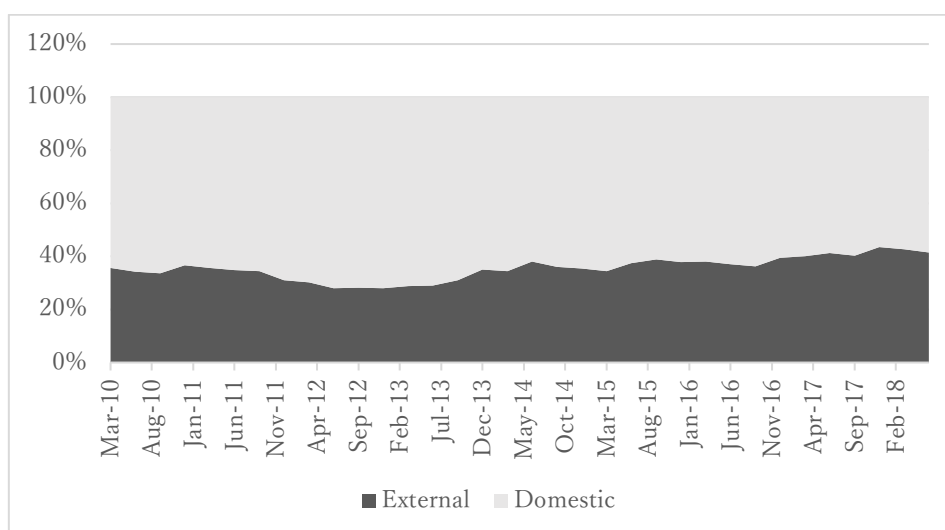


Figure 2 Domestic vs. external ratio of public debts in Jordan

Source: Bank of Jordan

Jordan’s public debt (as of 2013–2015), reflected interest payments of 4% of GDP, which is not necessarily as serious as that of other Middle East and emerging economies such as Egypt, which is approximately 7% of GDP. However, the cumulative public debt of nearly 100%, is still as high as Egypt (Figure 3).

IMF simulations show that after 2018, the public debt in Jordan will start to decrease, and reach 77.7% by 2022. IMF estimates that the public debt will remain sustainable as long as the government follows certain principles of fiscal discipline³⁵. This project might have contributed to the enhancement of debt sustainability.

³³ Data from Bank of Jordan

³⁴ If the government issues a significant amount of bonds in order to meet the financial demand, this will increase the market interest rate, thereby suppressing the private demand.

³⁵ IMF (2017), op. cit. Annex I. Debt Sustainability Analyses.

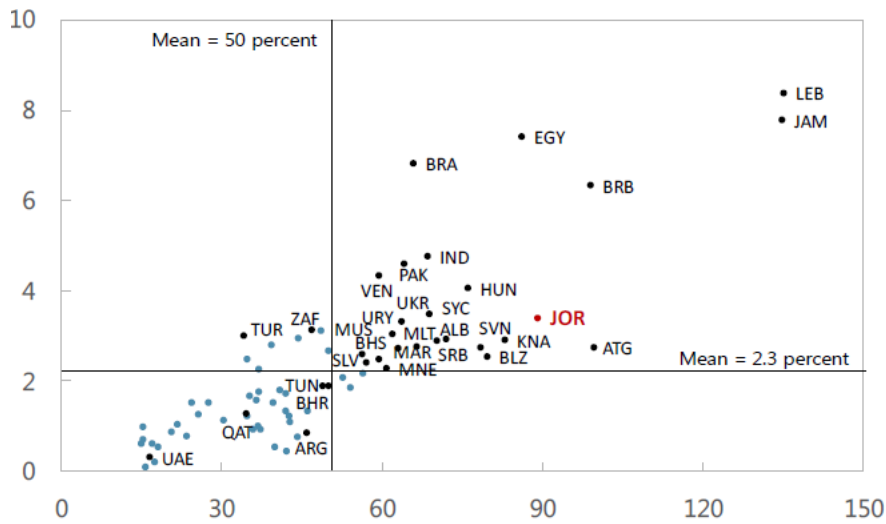


Figure 3 International Comparison of Public Debt (2013-2015)

Source : IMF

Note : Vertical axis shows paid interest/GDP, while horizontal axis shows cumulative public debts/GDP

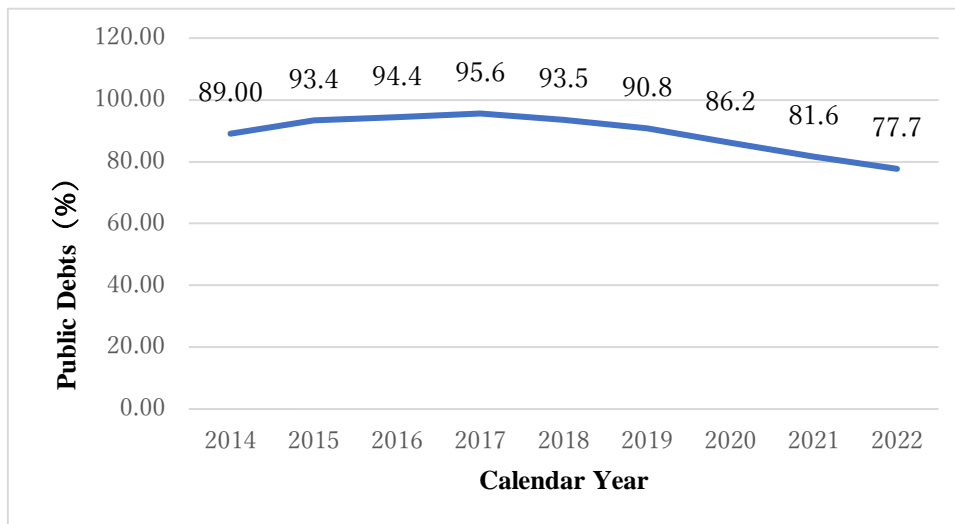


Figure 4 Public Debts performance and IMF forecast (Unit: %)

Source: IMF

(c) Stabilization of Macroeconomic Management

As shown in Table 3, GDP growth rate was 3.4% at the time of appraisal (2014), and 2.1% at the time of ex-post evaluation (2017). The current balance was -7.2% per GDP at the time of appraisal (2014) and worsened to -10.6% at the time of ex-post-evaluation (2017).

These figures alone are not enough to prove the project's contribution to the stabilization of the macroeconomy. Therefore, as a reference, the time-series data on economic stability have been examined to evaluate economic stabilization.

Table 3 Indicators Related to Stabilization of the Macroeconomy

| | 2014 | 2015 | 2016 | 2017 |
|-------------------------|------|------|------|------|
| Consumer Price Rate (%) | 2.9 | -0.9 | 0.8 | 3.3 |
| Unemployment Rate (%) | 11.9 | 13.1 | 15.3 | 18.3 |

Source: IMF (2014-2016), Department of Statistics (2018) and Statistica (2017)³⁶

Consumer Price Rates showed deflationary trends in 2015 and 2016 but reached 3.3% in 2017. The unemployment rate had begun to increase from 2014, and reached 18.3% in 2017. Jordan's macroeconomy is, as mentioned above, improving overall, but the rise and fall of indicators are due to factors external to the project, and therefore, it was impossible to show the quantitative causality.

(2) Qualitative Effects

(a) Improvement of Fiscal Discipline and Stabilization of Macroeconomic Management

Through the implementation of the project, the deficit subsidy to NEPCO has been reduced, contributing to the enhancement of fiscal discipline, according to the Government of Jordan.³⁷ Since the stabilization of fiscal discipline is an important factor for the stabilization of macroeconomic management, this project might have also contributed to a certain extent to the latter. JICA appointed an expert to the Ministry of Finance from 2015–2017, which helped create a positive impression for Japanese assistance. In addition, in February 2016, EU and the Government of Jordan agreed to establish an assistance framework called the “Jordan Compact”³⁸ as part of the Syrian refugee measures, combining humanitarian and development assistance, with donor pledges of 12 billion USD for grant assistance and 40 billion USD for loan assistance by 2020. For budgetary support, approximately 300 million USD have been committed mainly from the US and EU,³⁹ which contributes to these additional impacts as external factors that need to be recognized.

(b) Reduction of Burden for Refugee Hosting Communities

According to the Jordanian side, they have not recognized that this project has contributed significantly to reducing the financial burdens of the refugee hosting communities, or one of the objectives of the project was to address Syrian refugees. The electricity costs increased by 34%

³⁶ <https://www.statista.com/>

³⁷ Hearing from Ministry of Finance (March 2018).

³⁸ *The Jordan Compact : Lessons learnt and implications for future refugee compacts*, ODI, 2018, London, <https://data2.unhcr.org/en/documents/download/61932> (Accessed September 8, 2018)

³⁹ Out of financial demand of 2.65 billion USD in 2017, about 3 million USD was committed by US and EU for budget support; for financial demand of 2.52 billion USD in 2018, 111 million USD has been committed by the World Bank for budget support. *Jordan Response Platform for the Syria Crisis: 2017 Financial Status*, MOPIC, 2018, Amman. <http://www.jrpdc.org/> (Accessed September 9, 2018)

for the households in hosting communities between 2011 and 2016, and the annual cost for electricity supply for refugees is 120 million USD. The number of Syrian refugees has increased annually, reaching approximately 1.38 million in April 2017, more than twice the number at the time of appraisal (approximately 0.62 million). However, also according to the Jordanians, the burden could have been even larger if this project were not extended. The influx of Syrian refugees is influenced by factors such as 1) changes in the international situation, 2) the migration policy of the Government of Jordan, and 3) UN agencies and other donors' measures for Syrian refugees. Thus, in reality, it was difficult to plan ahead with these situations in mind at the time of appraisal.

3.2.2.2 Other Impacts

(1) Impacts on the Natural Environment

This project is meant to be budget support and as such, does not anticipate specific environmental effects; this ex-post evaluation tried to examine whether this project related policies have impacted the environment or society by using related materials. Ultimately, the results could identify nothing to those particular effects. However, the use of LNG for power generation has reduced the environmental burden, compared with the use of oil, according to the Jordanian side.⁴⁰

(2) Land Acquisition and Resident Relocation

This project is for budget support, anticipating no specific effect on resident relocation and land acquisition. At the time of appraisal, no specific effect was anticipated, and the same result was obtained in the ex-post evaluation.

(3) Unintended Positive/Negative Impact

Other impacts include the benefit to refugees in northern regions, such as improved access to water promoted by the project's implementation according to the Master Plan; the benefits of burden reduction for host communities would be recognized in future, as the completion of the water project is awaited for a certain period of time. On the other hand, in the short run, there was some effect on poverty reduction among refugees, according to the Jordanian side. This point is difficult to quantitatively measure, as there are no comparable social development indicators between the timing of appraisal and ex-post evaluation, but overall, the evaluator considers it reasonable to agree with the recognition of the Jordanian side on the effect of poverty reduction.⁴¹

The project has been highly effective, because it has contributed to promoting diversification of financing

⁴⁰ Hearing from NEPCO (March 2018)

⁴¹ Hearing from UNDP officer in charge of refugees. (July 2018)

sources by improving the debt management capacity and the deficit of NEPCO by introducing a cost-recovery mechanism in the electricity sector. Some degree of impact has been realized through such contributions as stabilizing macroeconomy by improving budget balance and reducing environmental burden by utilizing LNG.

In light of the above, this project has largely achieved its objectives. Therefore, the effectiveness and impact of the project are high.

3.3 Sustainability

3.3.1 Institutional Aspects of Operation and Maintenance

The progress of policy measures and actions of this project has been monitored by MOPIC. JICA has extended development policy lending for fiscal reforms in 2014, 2015 (this project), and 2016. These continued assistance efforts have helped strengthen the MOPIC’s monitoring capacity.

In the MOPIC, the International Cooperation Department (13 members) is in charge of donor coordination etc. and the Project Department (12 members) are in charge of implementing and monitoring this program (Figure 5). Also, as budgetary issues emerge, the Accounting Department takes a role, and the entire institution monitors the project.

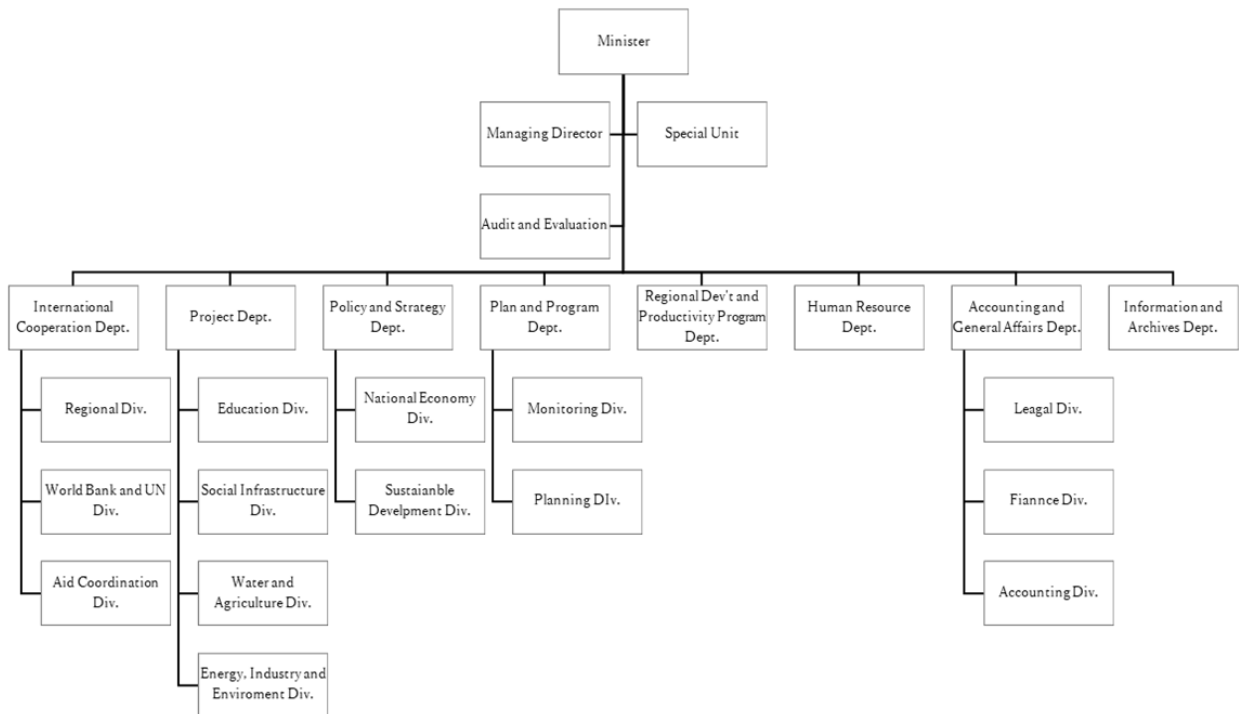


Figure 5 MOPIC Organigram

Sources: Evaluator’s drafting based on the organigram in the MOPIC web site⁴²

⁴² <http://www.mop.gov.jo/pages/viewpage.aspx?pageID=8> (Accessed August 20, 2018) .

3.4 Value Added by JICA

In this project, the “policy matrix” was drafted mainly by JICA. Whereas in other similar projects, the policy matrix applied was drafted by the World Bank and IMF and their policy matrix was used and implemented, the uniqueness of this project is that Japan has initiated drafting of policy matrix. Therefore, the points Japan emphasized in its aid policy for Jordan (such as assistance for Syrian refugees, etc.) could be reflected.

Furthermore, experts on the issuance of *sukuk* from the ICD, to the agency in charge of operations assistance at Jordan’s Ministry of Finance and Bank of Jordan, contributed to the achievement of the project’s policy goals. Also, “The Project for the Study on Electricity Sector Master Plan” (October 2014 to March 2017) (development study) has contributed to implementing the long-term electricity policies (deficit reduction and economic effect). In addition, for the water sector, “The Program for Urgent Improvement of Water Sector for the Host Communities of Syrian Refugees in Northern Governorates” (March 2014) is being implemented for the northern regions as a part of development policy, and if completed, it is expected to contribute to the stable supply of water. These dispatched experts have worked as operational officers or advisors in relevant agencies, and according to the Jordanian side of the project, JICA might have used its unique strength in this respect.

4. Conclusion, Lessons Learned, and Recommendations

4.1 Conclusion

This project aimed to build capacity of public debt management and improve public services (electricity and water) by supporting policy reforms in the fields of public debt management and public services (electricity and water), thereby contributing to stabilize the economic growth of Jordan. The project has been highly relevant to Jordan’s development policy and needs as well as Japan’s ODA policy, and the project planning and approach have been overall appropriate. The implementation of the project helped improve debt management capacity and issuance of *sukuk* bonds to diversify funding sources. It introduced a cost recovery mechanism in the electricity sector to reduce debt in electricity company, and thus the effectiveness is high. In addition, it has reduced the burden for deficit subsidy for electricity sector and partially contributed to the stabilization of the macroeconomy. Some degree of impact has also been realized, through such contributions as reducing environmental burden by utilizing LNG. Therefore, the project has generated certain effects so its effectiveness and impact are high.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

Among the goals described in country’s development plans (*Jordan 2025 (2015–2025)* and *Jordan Economic Growth Plan (2018–2022)*), goals in the fields of fiscal discipline and public

sector service are closely related to this project, and therefore must be monitored annually. In particular, a systematic design for cost recovery for electricity tariff must be autonomously implemented without delay due mainly to political interventions, and whether the actual tariff changes are reflected must be monitored. For the water sector, the achievement of the cost of water supply by energy efficiency and renewable energy, the improvement of WAJ's finances, and the reduction of burden on host communities for water supply cost are yet to be realized. Going forward, the International Department of MOPIC should hold regular thematic meetings, in cooperation with donors such as the Government of Japan or KfW, and jointly monitor the achievement of goals.

4.2.2 Recommendations to JICA

In Jordan, MOPIC is the single window for foreign aid, but compared with other countries, there is no donor that takes leadership in donor coordination, and consequently there is no regular place for donor meetings. However, various donors' budget support funds are not duplicated or conflicting with each other. Nevertheless, in future for further assistance effects to be realized, aid coordination at the policy level is indispensable. Japan is the top donor along with the US and EU in the area of budget support,⁴³ and so it has a strong presence in Jordan, and it should play a more active role in coordinating with MOPIC and each donor to institutionalize aid coordination.

4.3 Lessons Learned

(1) Development Policy Lending Can Be Effective If Combined with Technical Cooperation

This project has suggested that the combination of lending with technical cooperation (dispatch of experts, development studies, etc.) can provide more effective policy improvements. For development policy lending to realize the desired effects, in parallel with policy improvement programs, JICA should consider if it should extend technical cooperation in related fields or sectors, and if necessary, coordinate with different schemes to increase program effectiveness. This project is a good example of such an approach.

(2) Indirect Benefits of Development Policy Lending Are Hard To Be Recognized

Development policy lending is perceived more readily as an effective way to achieve fiscal and sector reforms, but on the other hand, general budgetary support like this provided fund is integrated into the national budget, not earmarked for specific social development investment purposes. Thus, the fact that the implementation of policy actions (such as submission of priority

⁴³ Performance based on 2011-2015 assistance (commitment basis) shows Japan is next to the US except for the years 2011 and 2013. ("Country Data-book: Jordan", Ministry of Foreign Affairs, 2017, Tokyo)

project proposals, and approval of policy paper, etc.) generates indirect effects in social development areas (such as stable supply of water and electricity, support for refugees and host communities, etc.) were hard to recognize. Therefore, in development policy lending, it is necessary to pay attention to the process setting indirect benefits in development matrix. It is also desirable to set specifically achievable objectives, considering the ranges of effects generated by policy actions.