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| Country Name | Project on Effective Utilization of Reservoirs and Auto-Promotion of Local Communities in the Sahel |
| Republic of Niger | |

I. Project Outline

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|---|--|--------------|--|---------------|------------|------------------------|--------------------------------|--|--|---|---|---|--|
| Background | <p>In Niger, about 80% of the total population has lived in rural areas and farmers have mostly engaged in rain-fed agriculture. Thus, the yield has been greatly affected by the weather conditions of the time. In 2011/12, approximately 519,000 tons of food shortage was predicted from low rainfall. Irrigated agriculture with reservoirs was an effective measure to mitigate the consequences of unseasonable weather and to contribute to stable agricultural production in the Sahel. Efforts were consistently made to combat desertification and make effective use of water resources. Nonetheless, regarding the rural development around the small reservoirs, farmers had only limited knowledge and technical level of maintenance and management of the reservoir, furthermore, agricultural equipment was not sufficiently available due to precarious livelihoods, and low agricultural productivity restricted access to market information. Furthermore, the administrative dissemination and management system was still feeble, and the reservoirs had not been effectively used.</p> | | | | | | | | | | | | |
| Objectives of the Project | <p>Through the establishment of the system for utilization of the reservoir, and broad capacity development of implementation and extension of the Farmer Field School (FFS) approach, as well as the improvement of agricultural productivity of farmers who participated in FFS, the project aims at promoting sustainable rural development through effective utilization of reservoirs in two target regions of Tahoua and Maradi regions, thereby contributing to sustainable utilization of reservoirs in the target regions and the application of the project results and lessons learned to Dosso, Niamey and Tillabéry regions.</p> <ol style="list-style-type: none"> Overall Goal: <ol style="list-style-type: none"> The reservoirs in Tahoua and Maradi are utilized sustainably. Results and lessons learned from the project are applied to the utilization of reservoirs in Dosso, Niamey, and Tillabéry. Project Purpose: Sustainable rural development is promoted by the effective utilization of reservoirs in Tahoua and Maradi. | | | | | | | | | | | | |
| Activities of the Project | <ol style="list-style-type: none"> Project Site: Regions of Tahoua and Maradi Main Activities: <ol style="list-style-type: none"> Identification of adequate farming and activities based on the local situation of water utilization, 2) Establishment of the system for utilization of reservoir, 3) Improvement of FFS implementation capacities of target extension workers, 4) Improvement of the agricultural situation of farmers participated in FFS, 4) Improvement of implementation capacities in the Regional Directorate of Agriculture (Direction Régionale de l'Agriculture: DRA) and the Ministry of Agriculture (Ministère de l'Agriculture: MAG). Inputs (to carry out the above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Niger Side</td> </tr> <tr> <td>1) Experts: 13 persons</td> <td>1) Staff allocated: 25 persons</td> </tr> <tr> <td>2) Trainees received in Japan: 6 persons</td> <td>2) Facilities: Office for the experts in MAG</td> </tr> <tr> <td>3) Third country training: 8 persons (in Kenya)</td> <td>3) Local cost: Administrative and operational expenses for Niger Side</td> </tr> <tr> <td>4) Equipment: Generator, projectors, air-conditioner, digital cameras, digital videos, copy machines, PCs, printers, motorbikes, etc.</td> <td></td> </tr> </table> | | | Japanese Side | Niger Side | 1) Experts: 13 persons | 1) Staff allocated: 25 persons | 2) Trainees received in Japan: 6 persons | 2) Facilities: Office for the experts in MAG | 3) Third country training: 8 persons (in Kenya) | 3) Local cost: Administrative and operational expenses for Niger Side | 4) Equipment: Generator, projectors, air-conditioner, digital cameras, digital videos, copy machines, PCs, printers, motorbikes, etc. | |
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| 4) Equipment: Generator, projectors, air-conditioner, digital cameras, digital videos, copy machines, PCs, printers, motorbikes, etc. | | | | | | | | | | | | | |
| Project Period | March 2012-March 2016 (Extension period: March 2015-March 2016) | Project Cost | (ex-ante) 336 million yen, (actual) 542million yen | | | | | | | | | | |
| Implementing Agency | Ministry of Agriculture (MAG), the Directorate of Extension and Technology Transfer (Direction de la Vulgarisation et du Transfert des Technologies: DVTT) | | | | | | | | | | | | |
| Cooperation Agency in Japan | NTC International Co., Ltd. Japan International Research Center for Agricultural Sciences | | | | | | | | | | | | |

II. Result of the Evaluation

<Constraints on Evaluation>

- Due to travel restrictions and lockdown measures raised during the COVID-19 Pandemic, data gathered in the rural areas during the ex-post evaluation was lower both in quantity and quality as on-site data collection and direct observation were not as feasible as planned. Nonetheless, mitigation measures were taken as follows; 1) rely more on existing monitoring data collected prior to COVID-19, 2) increase scope of desk-based review of administrative data, 3) use of remote data collection and analysis methods where available.

<Special Perspectives Considered in the Ex-Post Evaluation >

- As the result of the terminal evaluation of the project, the Project Design Matrix (PDM) was revised, and in order to achieve the project purpose, it was required to make an additional injection.

I Relevance

<Consistency with the Development Policy of Niger at the Time of Ex-Ante Evaluation >

The project was consistent with the development policies of Niger at the time of ex-ante evaluation. The Niger government formulated the Poverty Reduction Strategy (PRSP) in 2002, which was valid up to 2015. Rural development is one of the eight priority areas of the PRSP. In 2003, the government formulated the Rural Development Strategy (SDR) focusing on rural areas addressed in the PRSP. The 14 programs, emphasized promoting sustainable natural resource management, food security, and socio-economic development. The goal was to reduce poverty in rural areas from 66% to 52% by 2015. Furthermore, national efforts to prevent desertification were started in the

Presidential Special Program in 2000, and 66 reservoirs were planned to be created by 2004, and irrigation development by reservoirs was a pivotal measure in the development of Niger.

<Consistency with the Development Needs of Niger at the Time of Ex-Ante Evaluation >

The project was consistent with the needs of Niger at the time of ex-ante evaluation. In Niger, about 80% of the total population has lived in rural areas and farmers have mostly practiced rain-fed agriculture. Thus, the yield has been directly affected by the weather conditions of the time. In 2011/12, approximately 519,000 tons of food shortage was predicted due to the low rainfall. Irrigated agriculture utilizing reservoirs was considered an effective measure to mitigate the adverse effect of unseasonable weather. Under the circumstances, it was assumed to contribute to stable agricultural production in the Sahel.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan's ODA policy towards Niger. Japan's ODA was implemented from the perspectives of poverty reduction and human security in Niger. For that, based on the development policy of the Niger government, Japan intended to provide its support that contributes to poverty reduction and sustainable growth¹.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the time of Project Completion>

The Project Purpose was partially achieved. The 17 out of 18 target reservoirs functioned well at the time of project completion and that enabled local farmers to continue their activities with the use of the reservoirs or water wells to crop even during the dry season (Indicator 1). It was reported that some of the farmers who graduated from FFS continued voluntary activities through interactive exchanges among themselves (Indicator 2). In Tahoua, in particular, the members of the management committees of the six water user cooperatives were trained through the participation of the FFS by the project. Based on the training, they formed the Union of Cooperatives as learned in the FFS. They became capable of maintaining exchanges between them and pursue their voluntary activities from managerial perspectives. However, this kind of cooperative action putting farmers at their disposal was not confirmed in Maradi.

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have partially continued after the project completion. According to the survey result, 10 target reservoirs remained functional, but some of them were partially functional (4 sites) or not functional (4 sites). Some of the reservoirs were reported to be dried rather quickly due to water leakage when most needed during the dry season. Secondly, regarding the voluntary activities by graduates of FFS, most farmers in Tahoua became dormant as facilitators mainly due to lack of public funding after project completion. On the contrary, FFS graduates in Maradi have become active in almost all districts. Concurrently, they have engaged in cooperation with multiple multinational partner organizations in the region.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

Overall Goal 1 has been partially achieved and Overall Goal 2 has been achieved at the time of ex-post evaluation. As for the status of utilization of the reservoirs in Tahoua and Maradi, it was partially achieved the target value of the Overall Goal 1). Farmers continue to carry out their activities by making efficient use of 14 reservoirs in Tahoua and Maradi (Indicator 1). On the contrary, it mostly failed to continue the project activities at the time of the ex-post evaluation (Indicator 2). Regarding the Overall Goal 2): Although results and lessons learned from the project are applied to the utilization of reservoirs in Dosso, Niamey, and Tillabéry, according to the survey, they were highlighted at a reservoir in Dosso, Tillabéry, and Zinder, the same number of the target areas, but not in Niamey as originally planned (Indicator 3).

<Other Impacts at the time of Ex-post Evaluation>

According to the survey, socio-economic impacts of the project were confirmed as follows: 1) Creation of a weekly market; 2) invigoration of market gardening and fishing; 3) strengthening social cohesion at the village level; 4) improvement in agricultural practices; increase in agricultural production by applying technologies learned in FFS; 5) the development of a spirit of mutual aid among members and it has been felt even at the village level. Furthermore, cross-cutting issues like gender and young people were duly taken into consideration in providing a fair opportunity in all project sites. From the outset and the introduction of FFS through the implementation of the project, it was observed that more women become proactive in taking part in community activities. It was notable that they took initiatives such as promoting income-generating activities. For that, they even became visible in the decision-making process for the public interests in their community. On the other points of concern, there was no resettlement and land acquisition caused by the project, and thus there were no ramifications to do with them. Also, there were no unintended negative impacts observed at the time of the ex-post evaluation.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

| Aim | Indicators | Results |
|---|---|---|
| (Project Purpose) Sustainable rural development is promoted by the effective utilization of reservoirs in Tahoua and Maradi. | (Indicator 1) The target reservoirs that function well allow farmers to continue their activities with the use of the reservoirs such as cropping during the dry season. | Status of the Achievement: achieved (partially continued) (Project Completion) Out of 18 target reservoirs in Tahoua and Maradi, 5 reservoirs (Maggagi Rogo, Milli, Bokologi, Roura, Tshidafawa) were not properly functioning for the activities during the dry season. However, except for the one in Bokologi, the remaining 4 reservoirs were repaired, in addition to the fact that they also built water wells by the project in order to secure irrigation water in each area. Thus, the irrigation project could be continued by using the water source from water wells. (Ex-post Evaluation) 10 out of 18 reservoirs were functional (Tahoua: 5, Maradi: 5), but some of them are partially functional (Tahoua: 1, Maradi: 3) or not functional (Maradi: 4). A reason for the malfunction was that those reservoirs could not hold enough water for the dry season, due to a plausible structural defect to cause water |

¹ Ministry of Foreign Affairs, "ODA Country Databook" (2011)

| | <p>(Indicator 2) Farmers who graduated from FFS continue to do voluntary activities by maintaining interactive exchanges among themselves.</p> | <p>leakage.</p> <p>Status of the Achievement: partially achieved (partially continued) (Project Completion) In Tahoua, the members of the management committees of the six water user cooperatives, who were trained by the project and participated in the FFS, formed the Union of Cooperatives. These FFS graduates could maintain exchanges among them and facilitate their voluntary activities. In Niamey, FFSs on the model sites of Tchingal Bangou and Yantala Corniche pursued information exchanges between farmer facilitators. Farmer facilitators from Tchingal Bangou learn the procedure of poultry farming activities from facilitators in Yantala Corniche. Also, they discussed cultivation techniques and methods of selling lettuce, a specialty product in the area of Yantala Corniche. Whereas, in Maradi, some farmers graduating from 8 to 12 sites continued to carry out FFS activities after the project, bringing with them several hundred farmers, even if they did not make an activity plan. These activities continue because of the dynamism of these farmers who manage to mobilize funds with interested partners such as the Family Farming Development Programme (Programme de Développement de l'Agriculture Familiale: PRODAF), Food and Agriculture Organization (FAO), World Vision, etc. In the 4 sites of Maradi, those farmers could not be as active as expected due to the dysfunction of water reservoirs. (Ex-post Evaluation) In Tahoua, Zongon Roukaouzoum, has retained an FFS facilitator and a youth center trainer in the Project for the Sensitive Agriculture to Climate Risk Support (PASEC). However, no FFS graduates continued to be facilitators or actively engage in any communal activities to promote local farming in Tarwada, Changnassou, Bourdi II, Gourgoutoulow, Edir Wantaje. In Maladi, activities have been continued in almost all sites, and cooperation with external organizations has been active. Notably, PRODAF by International Fund for Agricultural Development (IFAD) has supported FFS in Rafin Vada, Bakassomouba, and Tkassaba. Agro-pastoral Farmers Field School (AFFS) in Dania has been supported by the FAO.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|--------------------------------|---------------------------------------|--------|--|--|---------|---|---------------------|-------------|---|---------------|--------------------|---|---------------------|-----------|---|---------------------|---------------|---|--------------------|--------------|---|--------------------|--------|--|--|------------|---|-----|--------------|---|-----|---------|---|-----|------------|---|-------------|-------|---|-------------|-------------|---|-------------|-------|---|-------------|-------|---|---------------------|-----------|---|-------------|-----------|---|-------------|--------------|---|-----|----------|---|-----|
| <p>(Overall Goal) 1) The reservoirs in Tahoua and Maradi are utilized sustainably.</p> | <p>(Indicator 1) Farmers continue to carry out their activities by making efficient use of at least 12 reservoirs in the regions of Tahoua and Maradi.</p> | <p>(Ex-post Evaluation) Achieved Out of 18 target sites in Tahoua and Maradi, a total of 14 reservoirs have been used for sustainable agricultural production through its function of water-saving, distribution for farming, etc. Although no data available in some sites, the number of farmers who benefit from the reservoir was confirmed as shown in Table 1.</p> <p style="text-align: center;">Table 1: The Status of Utilization of the Reservoir</p> <table border="1" data-bbox="756 1288 1541 1989"> <thead> <tr> <th></th> <th>Effective Use of the Reservoir</th> <th>The Number of Farmers (Beneficiaries)</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">Tahoua</td> </tr> <tr> <td>Tarwada</td> <td style="text-align: center;">○</td> <td>10 market gardeners</td> </tr> <tr> <td>Changnassou</td> <td style="text-align: center;">x</td> <td>No activities</td> </tr> <tr> <td>Zongon Roukaouzoum</td> <td style="text-align: center;">○</td> <td>Approx. 100 farmers</td> </tr> <tr> <td>Bourdi II</td> <td style="text-align: center;">○</td> <td>Approx. 100 farmers</td> </tr> <tr> <td>Gourgoutoulow</td> <td style="text-align: center;">○</td> <td>Approx. 50 farmers</td> </tr> <tr> <td>Edir Wantaje</td> <td style="text-align: center;">○</td> <td>Approx. 50 farmers</td> </tr> <tr> <td colspan="3" style="text-align: center;">Maradi</td> </tr> <tr> <td>Rafin Vada</td> <td style="text-align: center;">○</td> <td>N/A</td> </tr> <tr> <td>Bakassomouba</td> <td style="text-align: center;">○</td> <td>N/A</td> </tr> <tr> <td>Koumchi</td> <td style="text-align: center;">○</td> <td>N/A</td> </tr> <tr> <td>Tchidafawa</td> <td style="text-align: center;">○</td> <td>126 farmers</td> </tr> <tr> <td>Roura</td> <td style="text-align: center;">○</td> <td>120 farmers</td> </tr> <tr> <td>Magagi Rogo</td> <td style="text-align: center;">○</td> <td>135 farmers</td> </tr> <tr> <td>Danja</td> <td style="text-align: center;">○</td> <td>235 farmers</td> </tr> <tr> <td>Milli</td> <td style="text-align: center;">x</td> <td>Approx. 100 farmers</td> </tr> <tr> <td>Beri Beri</td> <td style="text-align: center;">○</td> <td>220 farmers</td> </tr> <tr> <td>Takassaba</td> <td style="text-align: center;">○</td> <td>204 farmers</td> </tr> <tr> <td>Kanembakache</td> <td style="text-align: center;">x</td> <td>N/A</td> </tr> <tr> <td>Bokologi</td> <td style="text-align: center;">x</td> <td>N/A</td> </tr> </tbody> </table> <p>Source: Regional Chief of extension service of Maradi, Regional Directorate of Rural Engineering of Maradi, Regional Chief of extension service of Tahoua.</p> | | Effective Use of the Reservoir | The Number of Farmers (Beneficiaries) | Tahoua | | | Tarwada | ○ | 10 market gardeners | Changnassou | x | No activities | Zongon Roukaouzoum | ○ | Approx. 100 farmers | Bourdi II | ○ | Approx. 100 farmers | Gourgoutoulow | ○ | Approx. 50 farmers | Edir Wantaje | ○ | Approx. 50 farmers | Maradi | | | Rafin Vada | ○ | N/A | Bakassomouba | ○ | N/A | Koumchi | ○ | N/A | Tchidafawa | ○ | 126 farmers | Roura | ○ | 120 farmers | Magagi Rogo | ○ | 135 farmers | Danja | ○ | 235 farmers | Milli | x | Approx. 100 farmers | Beri Beri | ○ | 220 farmers | Takassaba | ○ | 204 farmers | Kanembakache | x | N/A | Bokologi | x | N/A |
| | Effective Use of the Reservoir | The Number of Farmers (Beneficiaries) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tahoua | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tarwada | ○ | 10 market gardeners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Changnassou | x | No activities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zongon Roukaouzoum | ○ | Approx. 100 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourdi II | ○ | Approx. 100 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gourgoutoulow | ○ | Approx. 50 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Edir Wantaje | ○ | Approx. 50 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maradi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rafin Vada | ○ | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bakassomouba | ○ | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Koumchi | ○ | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tchidafawa | ○ | 126 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Roura | ○ | 120 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Magagi Rogo | ○ | 135 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Danja | ○ | 235 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milli | x | Approx. 100 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Beri Beri | ○ | 220 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Takassaba | ○ | 204 farmers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kanembakache | x | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bokologi | x | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>(Indicator 2) More than 50% of the activities implemented at the time of the completion of the project continue to be</p> | <p>(Ex-post Evaluation) Not achieved The activities introduced by the project and reflected in the Activity Plan (e.g. FFS, rehabilitation, and O&M of the reservoir, cooperative promotion) were</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| | carried out. | expected to continue in at least half of the target sites. However, it turned out that they have been continued in only 2 sites (Zongon Roukaouzoum, Bourdi II) in Tahoua. In Maradi, all sites either stopped following their “Activity Plan” or no data available regarding the status. : |
| 2) Results and lessons learned from the project are applied to the utilization of reservoirs in Dosso, Niamey, and Tillabéry. | (Indicator 3) The results and lessons learned from the project are highlighted at a reservoir at least in Dosso, Niamey, and Tillabéry, respectively | (Ex-post Evaluation) Achieved In addition to Tahoua and Maradi, the FFS approach extension program has been implemented in the regions of Dosso, Tillabéry, and Zinder with an improvement of the approach to be more inclusive as AFFS. Although the project was not rolled out in Niamey, this was implemented in those regions above such as more rural Zander where the majority of poor reside, with the support of the Project for the Sensitive Agriculture to Climate risk support (PASEC). The activities are ranged from the training of master trainers and facilitators, to promote agriculture and animal production with due consideration of climate change. The results and lessons learned from the project are highlighted in the regions of Dosso, Tillabéry, and Zinder. |

Source : Questionnaire responses from DVTT

3 Efficiency

Although the outputs were produced as planned, both the project cost and project period exceeded the plan (ratio against the plan: 161% and 136%, respectively). The actual project cost significantly exceeded the plan. In response to a terrorist attack by Islamic extremists in Northern Mali in January 2013, an official ban was imposed in the region. To comply with a safety control measure of JICA, Japanese experts were obliged to evacuate from Tahoua and Maradi and the planned activities were to be carried out under the stewardship of those experts performing remote control. Furthermore, as the result of the terminal evaluation, the Project Design Matrix (PDM) was reviewed and revised decidedly, since, under given circumstances, the causal relationship of project outputs and the project purpose was not clear. As such, in order to achieve the project purpose, it was required to make an additional injection. Therefore, the efficiency of the project is low.

4 Sustainability

<Policy Aspect>

Synergistic promotion of sustainable natural resource management, food security, and socio-economic development has retained its importance in the national policy of the Government of Niger. The Action Plan of the “3N Initiative (Nigerians Feed Nigerians)” (2016-2020) has precisely targeted; 1) promotion of irrigated agriculture through water supply; 2) increase and diversification of agro-sylvo-pastoral and fishery productions; 3) a regular supply of rural and urban markets with agricultural and agri-food products; 4) improvement of the resilience of populations to cope with climate risks; 5) improvement of the nutritional status of Nigeriens.

< Institutional/Organizational Aspect>

As far as the Ministerial level is concerned, there has been no change in the organizational structure for the promotion of the FFS system and related activities introduced by the project. At the national level, on the other hand, the Government newly created the Agricultural Advice Promotion Agency (“L’Agence de Promotion du Conseil Agricole: APCA) specialized in coordination of all aspects of the extension worker both in the public and the private. Moreover, the Government established the Food Security and Nutrition Investment Fund (“Fonds d’Investissement pour la Sécurité Alimentaire et Nutritionnelle: FISAN), whose mandate is to prudently appraise, and finance needed activities in the agriculture sector. Although the Government has not intervened directly to promote the FFS approach, it has provided indirect support through the agencies. As such, it was considered that the creation of these organizations would not detract from the ongoing promotion of the FFS system as the FFS system has remained unchanged. DVTT of the Ministry of Agriculture in charge of the promotion of the FFS system has not had sufficient manpower considering the magnitude of national oversight. On the contrary, DVTT needed to retain around 300 extension workers. Due to the organizational reinforcement at the national level, it has been capable of deploying staff for extension of the FFS approach at the local sites.

<Technical Aspect>

According to the survey results, the staff, in general, have retained the skills and knowledge necessary to promote the FFS system introduced by the project. Also, the acquired skills have been strengthened through continuous training opportunities with other projects. It was reported that master trainers are trained during 5 sessions of 10 days each and, local facilitators are trained in 3 sessions of 7 days each. Furthermore, those documents such as guidelines and manuals for the FFS approach developed by the project have been amply utilized for training materials and references.

<Financial Aspect>

DVTT of the Ministry of Agriculture proposed a program to newly establish 500 FFS nation-wide, it has, however, not disbursed public funding at all to materialize it, either due to the security issues and, most recently, COVID-19 as its priority shift. On the project sites where the FFS system was already set up, the FFS activities were carried out more or less, but not as regularly as before mainly due to the lack of funding. Where activities are visible, they have been supported mostly by funding of the other donors through their projects. These projects are to mitigate the impact of climate change in agriculture (e.g. PASEC); the FAO through the Global Environmental Fund (GEF) as well as PRODAF funded by IFAD.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the financial aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The project partially achieved the Project Purpose and the Overall Goal. As for sustainability, although the coordination mechanism at the national level could provide support to the agriculture sector and skilled extension workers at the local level, the national budget has not been sufficiently secured for further extension of the FFS system. As for efficiency, the project cost and period exceeded the plan. Considering all of the above points, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

To MAG, DVTT

Although local farmers continued to carry out their activities by making efficient use of the reservoirs in Tahoua and Maradi, most of them do not check and monitor the working status of the “Activity Plan” as planned. They faced operational problems mainly because extension workers d

id not follow up on a regular basis so they stopped holding regular meetings and could not retain the skills to continue activities as it was during project implementation. It has caused dysfunctions that could not be solved at the level of some of these farmers’ cooperatives/associations such as occurred in some water reservoirs. The effectiveness and impact of the project may have been sustained if they were to exert stronger leadership in collective management in practice. As such, DVTT should clarify the reason why they were not able to follow up to nurture local farmers’ groups, and if necessary, request due support from other organizations such as the Agricultural Advice Promotion Agency (APCA).

Lessons Learned for JICA:

There are two points of concern derived from the ex-post evaluation of the project as follows.

Maintenance of the structure constructed by the project (e.g. reservoirs)

- Some reservoirs were not fully functional mostly due to structural water leakage. It is possible that although these reservoirs were duly constructed to be functional at the time of project completion, they must have been progressively leaking over years. During project implementation, local construction companies performed construction work, and local farmers provided labor to complete the construction of reservoirs. Thereafter, those farmers created a maintenance committee to oversee the maintenance and repairing of the reservoir. Although the degree of water leakage at each site is unknown and could have been varied in terms of needed repairing materials, if seriously required considerable rebuilding, the maintenance committee was supposed to contract out the repair work to a construction company. However, it turned out that many of the maintenance committees could not provide sufficient funding to manage necessary maintenance and repair. Thus, it was deemed essential to encourage and propose not only the maintenance committee but also the state's agricultural and civil engineering offices to continue financial and technical support for the procurement of domestic and/or external funding as the reservoir is respectfully public property in the regions. In that sense, it is recommended that a prospective project of similar nature should provide not only knowledge of prevention of water leakage, but also inventory formation of practical countermeasures at any level for hands-on training. In this case, participating farmers need to be trained in water leakage prevention measures, and/or the project must encourage them to locally devise countermeasures in their self-sustaining way, as maximizing the use of limited water resources is directly linked to the promotion of agricultural productivity, especially in the dry season.

Perception toward “Action Plan”

- It was observed that local farmers tended to implement their Action Plan only during the project period. If they had to continue implementing after project completion, they must have deliberately arranged ways and means to do so through project implementation. To have the plan remained feasible and well localized, it may require how best to find the middle ground to assimilate the traditional management methods they have normally used. It was revealed that for most farmers in the project, the Action Plan was perceived as just a tool for fundraising although it was originally intended to promote collective productivity in a longer time frame. Therefore, it is necessary not only to introduce the Action Plan as a concept but also to follow up on whether the purpose and significance of planning are sufficiently conveyed and understood. It is also important to detect and correct any potential misunderstandings in terms of the ownership issue during the project period.



Practical Cultivation of watermelon by the producers of Tchidafaoua,
Maradi region



A reservoir in good condition in Bourdi 2, Tahoua region