

## Summary of the Evaluation Results

1. Outline of the Project	
Country: United Republic of Tanzania	Project title: Technical Cooperation for Formulation and Training of the DADP Guidelines on Irrigation Scheme Development
Issue/Sector: Rural Development / Irrigation	Cooperation scheme: Technical Cooperation
Division in charge: Rural Development Department	Total cost (as of July 2009): 268.7 million yen
Period of Cooperation: February, 2007 – January, 2010	Partner Country's Implementing Organisations: Ministry of Water and Irrigation, Division of Irrigation Technical Services (DITS), Zonal Irrigation and Technical Service Unit (ZITSU)
	Japanese Cooperating Organisation(s):
	Related Cooperation: <ul style="list-style-type: none"> <li>· Technical Cooperation: Strengthening Backstopping Capacities for the DADP Planning and Implementation(2009.1-2011.12)</li> <li>· Development Study: The Study on the National Irrigation Master Plan in the United Republic of Tanzania(2001-2004)</li> </ul>
1-1 Background of the Project	
<p>As a result of “The Study on the National Irrigation Master Plan in the United Republic of Tanzania” assisted by JICA, the Guideline (hereinafter referred to as “G/L”) on Irrigation Scheme Formation for District Agricultural Development Plans (hereinafter referred to as “DADPs”) was formulated in order to promote irrigation development by districts under the Agriculture Sector Development Programme (hereinafter referred to as “ASDP”) in 2004. However, sensitization of the G/L such as training was not conducted, and the G/L was not fully utilized. Besides, it became obvious that implementation, and operation and maintenance (hereinafter referred to as “O&amp;M”) for proper irrigation development should also be covered by the G/L. Therefore, the Government of Tanzania (hereinafter referred to as “GOT”) requested the Government of Japan to provide technical assistance for formulating a comprehensive G/L for irrigation development under DADPs, and assisting training of the G/L.</p> <p>The Japanese Technical Cooperation for Formulation and Training of the DADP G/L on Irrigation Scheme Development (hereinafter referred to as “the TC”) started in February, 2007 for the purpose of capacity development of zonal and districts’ staff in planning, implementation, and O&amp;M. The TC with the stakeholders’ involvement is engaged in formulating a comprehensive G/L and carrying out verification studies, conducting training, and strengthening technical backstopping from Zonal Irrigation and Technical Services Units (hereinafter referred to as “ZITSU”) to districts’ officials.</p>	
1-2 Project Overview	

- (1) Overall Goal: Irrigation scheme development under DADPs is improved and promoted.
- (2) Project Purpose: Capacities of the target Districts and Zonal Irrigation Technical Service Units for planning, implementation and O&M of irrigation schemes are enhanced.
- (3) Outputs:
- 1) Practical technical G/Ls on planning, implementation of irrigation scheme development, and O&M under DADPs (“Comprehensive G/L”) are developed with stakeholders.
  - 2) Technical support systems for irrigation technicians at district level are strengthened.
- (4) Inputs (as of September 2009)
- Japanese side:
- Japanese experts
    - Long-term: 2 persons
    - Short-term: 12 persons (37.5MM)
  - Training in Japan: 5 persons
  - Equipments: USD288,771
  - Operational Expenses: USD568,455
- Tanzania side:
- 21 personnel (3 in DITS, 9 at Zonal level and 9 at District level)
  - Project Offices: 2 offices within DITS and 4 offices in each ZITSU
  - Local Cost Sharing: USD533,205

2. Outline of the Final Evaluation Team

Evaluation Team	<ol style="list-style-type: none"> <li>1. Leader, Dr. Hirofumi Hoshi, Director, Eastern &amp; Southern Africa Dev., Rural Development Department, JICA</li> <li>2. Irrigation Construction Management, Mr. Manabu Kashiwabara, Deputy Director, Design Division, Rural Infrastructure Department, Rural Development Bureau, Ministry of Agriculture, Forestry and Fisheries</li> <li>3. Evaluation Coordinator, Mr. Kazuyuki Fujiwara, Associate Expert, Eastern &amp; Southern Africa Division, Rural Development Department, JICA</li> <li>4. Evaluation Analysis, Yuko Tanaka, Consultant, VSOC</li> </ol>
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Period	August 30, 2009 – September 17, 2009	Type of Evaluation: Final
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3. Summary of Evaluation Results

3-1 Achievements

(1) Likelihood of Achieving the Project Purpose

Project Purpose: Capacities of the target Districts and Zonal Irrigation Technical Service Units for planning, implementation and O&M of irrigation schemes are enhanced.

The Evaluation Team agreed that the TC was originally aimed to enhance capacities of the target group mainly through trainings and for some districts, through verification activities. Taking this into account, it can be said that the Project Purpose has mostly been achieved. The formulation G/L has been utilized for all of the proposals for the irrigation development schemes for DIDF. On the other hand, the implementation and O&M G/Ls are not widely circulated yet; therefore there are limited applications of the G/Ls especially with regard to the O&M scheme (indicator 1).

The irrigation staff at both zonal and district levels from 4 target zones have participated workshops/trainings on all the stages of the G/Ls (i.e. from formulation to O&M), hence it is expected that they will be able to utilize them in their respective irrigation development schemes once the G/Ls are finalized and circulated in each district.

There are 4 irrigation staff at Morogoro ZITSU and 5 irrigation staff at Kilimanjaro ZITSU who have undertaken training courses to district irrigation staff as trainers of the G/Ls. As for Mbeya and Mtwara irrigation zones there are two irrigation staff in each zone that are qualified as trainers of the G/Ls (indicator 2).

## (2) Level of Achievements: Outputs

Output 1: Practical technical G/Ls on planning, implementation of irrigation scheme development, and O&M under DADPs (“Comprehensive G/L”) are developed with stakeholders.

Output 1 has been mostly achieved. The TC has implemented 6 workshops (1 on formulation, 4 on implementation and 1 on O&M and training) inviting irrigation staff from DITS as well as all of the seven ZITSUs, other stakeholders in order to discuss the contents of the G/Ls (indicator 1-1).

The TC has also implemented various training courses for irrigation staff at the District level including district irrigation technicians. According to the questionnaire after the training, more than 90% of the district irrigation staff consider they could utilize the Irrigation G/Ls provided that they get technical support from the ZITSUs (indicator 1-2). There are some delays in verification activities on implementation G/Ls; however the construction is expected to be completed before the end of the TC.

The remaining tasks for Output 1 are 1) to steadily complete the construction at two verification sites (Morogoro and Kilimanjaro Irrigation Zones), 2) to bring separate G/Ls into one “Comprehensive G/L”, and 3) to finalise the comprehensive G/L reflecting the results of the workshop on the Comprehensive G/L to be held in October 2009. The verification of O&M was completed in December 2008 in another irrigation scheme in Morogoro Irrigation Zone and its results have been reflected to the G/L.

Output 2: Technical support systems for irrigation technicians at district level are strengthened.

The Output 2 has been achieved as per POs of the TC. Technical services that are supposed to be provided by zonal irrigation staff are clarified in the G/Ls and they are shared and agreed by irrigation staff at zonal and district levels through trainings/workshops held by the TC (indicator 2-1). In terms of number of technical services provided to the districts by zonal staff, it can be assumed that it has increased since there are increased applications for DIDF in 4 target zones, which require technical

assistance from the zone at various stages of the formulation process (indicator 2-2). The remaining task for Output 2 is to elaborate a dissemination plan of the Comprehensive G/L including training programmes and institutional arrangements for capacity building and technical supports for District irrigation technicians, by clarifying roles and responsibilities of both zones and districts in order to make it realize those trainings.

### 3-2 Results as per the Five Evaluation Criteria

#### (1) Relevance

The TC's relevance is high vis-à-vis the national policies of Tanzania, needs of the target groups, and the official development assistance policies of Japan.

In Tanzania, rain-fed agriculture is mostly common method, making farmers vulnerable to irregular as well as unstable rainfalls. The irrigation development is a fundamental activity in order to improve amount of harvest, thereby stabilizing agricultural production as well as improving food securities.

In light of national policy in Tanzania, irrigation development is one of the priority areas within agricultural sector, and the TC's goals and objectives are in line with national level policies and strategies, including National Irrigation Policy which is in a final stage of approval.

Within Japan's official development assistance policy for Tanzania, the TC is located within one of the five priority areas; therefore it is in line with Japan's cooperation policy as well.

#### (2) Effectiveness

The effectiveness of the TC is mostly assured. Regarding the level of achievement of the Project Purpose, it has been mostly achieved. The G/Ls are started to be utilized especially at the formulation stage. For the implementation and O&M stages, the contents of the G/Ls have been understood by district technicians in 4 target zones. The effectiveness of the TC would be enhanced even more if the district technicians could utilize not only formulation but also implementation and O&M guidelines in their actual irrigation scheme(s), through which they shall deepen their knowledge and experiences on all the steps of the G/L.

Both of the Outputs have contributed to achieve the Project Purpose. The verification activities under Output 1 turned out to be effective in enhancing technical knowledge and capacities of district irrigation technicians, however, the scope of verification sites are limited to 2 zones in implementation and 1 zone in the O&M. The effectiveness of the TC would increase even more if the G/Ls are ensured to be utilized by district technicians in the rest of the zones that did not have verification sites (particularly in Mbeya and Mtwara zones).

#### (3) Efficiency

Overall, the level of efficiency of the TC has been adequate. The inputs of the TC have been utilised to produce outputs. One of the promoting factors to efficiency lays in Japan's long-term cooperations to the agricultural sector in Tanzania, including National Irrigation Master Plan under the scheme of development study, as well as on-going technical cooperation TC-SDIA, that has enhanced good working relationships between Japanese Experts and irrigation staff at national, zonal and district levels.

In addition, the financial support to the ASDP basket fund has facilitated local cost-sharing by Tanzanian side especially for constructions at the verification sites.

The delay in verification sites, may have affected the TC to some extent, however, the time and efforts spent in order to secure funding for construction from the GOT were not in vain, since the process itself has fostered the ownership of the Tanzanian side.

The inhibiting factors that caused some delays in the verification sites in two irrigation zones include inadequate coordination between/within the two parties as well as effects from natural conditions such as rainy seasons.

#### (4) Impact

One can observe some positive factors that can contribute to the achievement of overall goal, such as an increase in number of irrigation development schemes as well as the expansion of areas under irrigation. The TC has involved staff from ZITSUs outside the target area and other stakeholders to share and discuss the contents of the G/Ls, hence information on the contents of the G/L has been given outside the target zones. In addition, some positive impacts of the TC other than overall goal include: 1) Enhanced relationships between ZITSUs and the districts (see section 3.4.3); 2) Raising awareness of irrigation development matters within district authorities, and 3) Developed mutual understanding among irrigation staff and related institutions regarding the procedure of the G/L, using the G/L as a common tool to plan, implement and undertake O&M for irrigation development scheme(s).

No negative impacts have been reported so far.

#### (5) Sustainability

Taking account of policy, organisational, financial and technical aspects, sustainability of the effects of the TC, after its completion, is moderately assured.

1) Policy aspects: From the policy perspective, there is a strong political will to put agricultural development into the national development priority, and irrigation development remains important within agricultural development. National Irrigation Policy (NIP) is now at the final stage of approval and the Comprehensive G/L developed by the TC is going to be an important tool in implementing NIP. The ASDP, which is an umbrella programme over DADPs, will be reviewed in 2013, accordingly, the political sustainability would be reinforced if the Comprehensive G/L is revised and upgraded in accordance with the revised ASDP, and later on with regard to the revised DADP.

2) Organisational and financial aspects: At the central level, the DITS, under the Ministry of Water and Irrigation (MoWI), has been reinforced both in terms of organizational structure and budget allocation. It plans to recruit 30 irrigation staff per year at central and zonal levels within the next few years. At the district level, the DITS has recommended to the district councils that they should employ at least five irrigation staff in each district. If those plans are covered by the actual budgetary plans, the organisational sustainability would be enhanced. In terms of institutional arrangements for revising the G/Ls and for training newly recruited irrigation staff, the sustainability would increase if DITS, together

with zones and districts, identifies a section and designates personnel in charge in order to bring forward these activities.

3) Technical aspects: The TC has transmitted techniques for planning, implementing, and undertaking O&M of the irrigation development to target zones, and those techniques are systematically summarised in the Comprehensive G/Ls. The irrigation staff at both district and zonal levels have enhanced their knowledge on each step of irrigation development, through participating in trainings either as participants and/or trainers. Some of the district irrigation staff, particularly at the verification sites, have further deepened their technical experiences through participating in the verification activities. The contents of the G/L are shared with zone irrigation staff outside the target zones as well. The G/Ls developed by the TC can be utilised nation-wide once it is circulated to each district and it is in line with the procedure of DADPs. The technical sustainability would be reinforced if the G/Ls are periodically reviewed and upgraded effectively by reflecting for example any changes in DADP procedure and/or introduction of alternative irrigation methodologies that are not covered by the current G/L.

#### (6) Factors that promoted/ inhibited realization of effects

- 1) Promoting factors: Japan's Cooperation in agricultural sector in Tanzania; Policy priority on agriculture and irrigation development; and Enhancement of relationships between zone and district irrigation staff have been identified as promoting factors to effectively implement the Project.
- 2) Inhibiting factors: Shortage of irrigation staff and insufficient clarification of personnel in charge; Delay in verification sites; Lack of experiences and equipments for utilising O&M Forms have been identified as inhibiting factors to effectively implement the Project.

#### 3-3 Conclusion

Apart from some delays caused at the verification sites, the TC has made good progress so far. The Project Purpose has been mostly achieved, and it is expected that more district irrigation staff would enhance their knowledge and techniques in theory as well as in practice as they undertake further irrigation development activities following the G/Ls. In terms of the five evaluation criteria, the relevance is high, the effectiveness is assured mostly and the efficiency is adequate. The positive impacts have been observed both at zonal and district levels and the information on G/Ls have passed to outside the target zones. In addition, the sustainability of the TC can be said that it is moderately assured.

#### 3-4 Recommendations and Lessons learned

##### 3-4-1 Recommendations

On the ground of the results of the study summarised above, the Evaluation Team has made the

following recommendations to the TC.

(1) The remaining activities below should be completed before the termination of the TC.

- 1) The DITS/TC is advised to follow up and monitor that the construction of the implementation G/L verification sites (Mbalangwe and Mahande) will be steadily completed.
- 2) By consolidating the formulation G/L and the implementation G/L into one and by reflecting the results of the workshop to be held in October 2009, the DITS/TC is recommended to accomplish and publish the Comprehensive G/L.
- 3) In accordance with the PO, the DITS/TC holds sensitization seminars on the Comprehensive G/L for other Irrigation Zones <activity 2-4.>.
- 4) According to the PO, the TC proposes to the DITS a dissemination plan of the Comprehensive G/L including training programmes and institutional arrangements for capacity building and technical supports for District irrigation technicians <activity 2-5.>.

(2) The Guideline should be revised and to this end, the trainings should be conducted.

- 1) The G/L should be reviewed and regularly updated/upgraded (including information that covers alternatives of irrigation methods).
- 2) The DITS is recommended to identify the responsible section as well as to appoint the responsible personnel for the review and regular upgrading of the G/L mentioned above in (1).

(3) Implementation mechanisms/institutional arrangements should be clarified and established.

- 1) The DITS is suggested to follow up the distribution of the G/L to the districts.
- 2) The districts are advised to strengthen the follow-up mechanism regarding the procedures of the G/L.

(4) Capacity development/ Trainings

- 1) The sense of ownership of the districts should be further encouraged and nourished trainings.
- 2) The districts are suggested to take measures for training their irrigation staff by using District Agricultural Capacity Building Grant.
- 3) To this end, trainings should be conducted. The DITS, in collaboration with districts, should identify and coordinate appropriate institutions to carry out above trainings.

#### 3-4-2 Lessons learned

1. It is found that the Guidelines are utilised since the Guidelines are well aligned with planning and budgeting system of the Government. The participatory process to develop and improve the Guidelines through workshops and trainings raises awareness, understanding and ownership to the users and stakeholders.
2. Synergy effects were observed. The ownership and funding of the Government are enhanced and secured since the TC was conducted in a manner that the TC is fully aligned with the ASDP basket funding (sector budget support) mechanism in the country where budget support is introduced.

3. The TC started developing the G/L from the level such that district irrigation technicians and farmers are able to participate in the formulation, implementation, operation and maintenance of the irrigation development schemes. It resulted in the capacity enhancement of the district irrigation technicians and farmers. It is further expected that the technical level of them will be enhanced so that large scale and highly technical irrigation development will be expanded.

4. Verification activities = OJT = capacity development

It has been observed that participation in the verification activities make difference in the capacity development of the personnel. In developing capacity of the irrigation technicians, it can be said that not only learning through workshops and trainings but also involving in the actual implementation on the ground was effective.

5. In setting capacity development/enhancement as the project purpose, it would be important to set more specified indicators which could measure the changes before and after the TC.

6. It is important that from the beginning/initial stage, stakeholders agree the details of the inputs and activities so that the appropriate inputs are timely provided as planned.