



Good Stories in Irrigation Development

**Japan International Cooperation Agency
Tanzania Office
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Introduction

Japan International Cooperation Agency (JICA) has been a development partner to Tanzania since 1962.



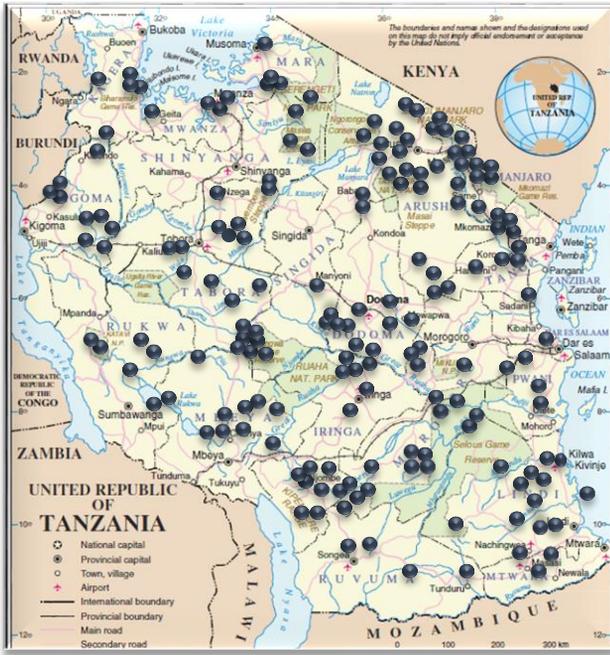
Lower Moshi Irrigation Scheme, Moshi,

Kilimanjaro Region

In Tanzania, irrigated area increased to 475,000 ha in 2017 from 274,000 ha in 2008.

One of the major components of JICA's contribution to the agriculture sector is focused on irrigation and rice sector development. JICA's cooperation began in 1974 with the commencement of "Kilimanjaro Region Integrated Development Plan" project. Since then, JICA has engaged in irrigation infrastructure development in Lower Moshi Irrigation Scheme (1984), Ndungu Irrigation Scheme (1987), Mwega Irrigation Scheme (2000). Then, JICA assisted the development of National Irrigation Master Plan (NIMP) in 2002 and then its revision in 2018. After the development of NIMP 2002, a series of technical cooperation projects have been implemented to support improvement of the irrigation development capacity, including capacity development of the irrigation engineers and irrigation officers by technical trainings.





Map of SSIDP-supported irrigation schemes (the dots show the location)

The loan project, Small Scale Irrigation Development Project (SSIDP) rehabilitated or constructed over 100 small irrigation schemes (irrigation capacity with under 500 ha) all over Tanzania 2013 (please see the map on the left). Irrigation engineers and officers together with irrigator's organizations have participated in various training programs to ensure sustainable and practical irrigation scheme development, such as formulation and implementation (F&I) and operation and maintenance (O&M) of irrigation schemes.

Projects for Capacity Development

Pre-TANCAID (2007.1-2010.1):

Developed Comprehensive Guidelines for Irrigation Development (CGL), and disseminated in the central government.

TANCAID (2010.12-2014.6):

Disseminate CGL to whole country. Conducted trainings for all 132 Local Government Authorities (LGAs).

TANCAID2 (2015.8-2020.8):

Promote sustainable use of CGL.

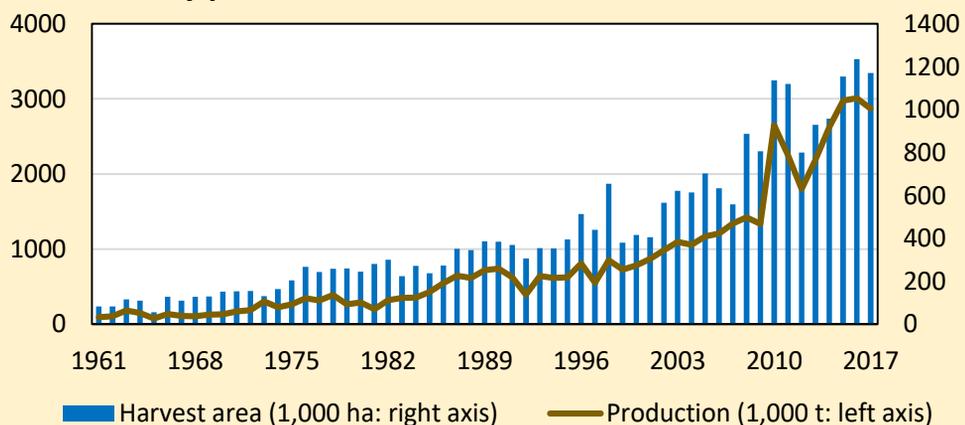
1. Practical implementation of CGL under SSIDP.
2. Improving management of all irrigation development projects through establishing monitoring/reporting system.
3. Improving implementation capacity of LGAs.



Head works supported by SSIDP

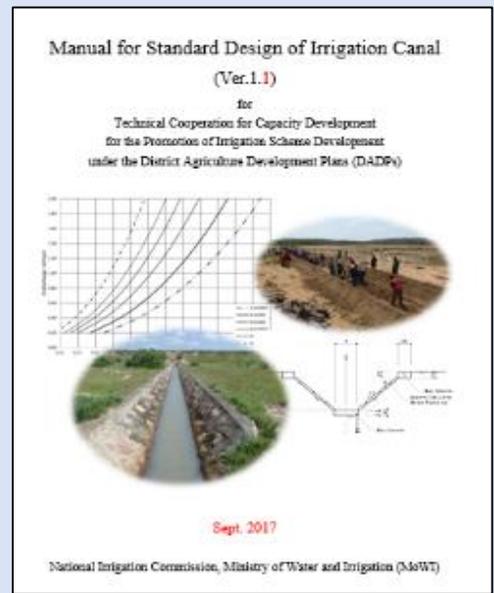
Together with irrigation infrastructure development, JICA has also supported capacity building on rice farming across the country. Now, Tanzania achieved self-sufficiency of rice production.

Paddy production and harvested area in Tanzania



Activities based on CGL

Formulation and Implementation of irrigation scheme construction



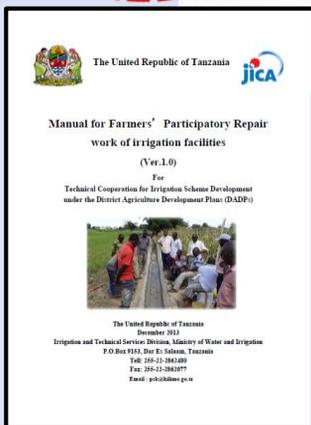
Rehabilitation of Ulyanyama irrigation scheme, Sikonge District Tabora region

Before



After





Participatory Repair work training

Participatory operation and maintenance



Number of participants to the training through TANCAID2

Irrigation Engineers and officers: 3,000

Local Government Officers: 3,400

Farmers of Irrigators Organizations: 9,300

Voices from the field

Mr. Rajabu Juma Chejo

Irrigated farming is more reliable than rain fed agriculture practice.

“Kilimo ni Maisha yangu (Farming is my Life)”.



After attending the training, I encouraged other farmers, especially young farmers, on how agricultural production benefits us and promoted the necessity of proactive operation and maintenance of our irrigation scheme.

In addition to contributing to irrigation management fees, I always participate in irrigation scheme improvement activities. As a result of family budgeting, the profit from rice production was invested in purchasing two sewing machines for my wife to diversify the income source. Now my wife operates tailoring service at home.

The next step-up is to start rice value addition business.

Ms. Tatu Abdallah Rwambo

“I share the knowledge obtained from the irrigation scheme O&M training programs with other motivated farmers including the ones from outside of the scheme.”



Paddy yield increased to 6.4 t/ha from 5.6 t/ha thanks to the assured irrigation.

Water availability has increased because the committee on water distribution functions properly. The collection of irrigation fees improved as well. Before training, we paid the service fees to irrigation committee leaders. After the training, members pay through a bank account and submit the payment slip to the treasurer. Such improved transparency helped to reduce financial losses and misuses in the committee.

Ms. Tatu Mrisho Mbogo

“I managed to pay the University tuition fees for my child. I also started a small shop and purchased farm plots after practicing irrigation farming.”

Between December and May, I cultivate rice mainly by rain-fed and supplemental irrigation, and maize under rain-fed. I usually sow rice again in July, and harvest it in November. This season depends fully on irrigation.

There used to be no prior planning of irrigation water sharing. After the operation and management training program, the introduced scheduled water distribution minimized conflicts among the farmers.



Now all the members get water according to the irrigation water distribution schedule.



Mr. Simoni Elieza Kalosa

“In 2017 I achieved paddy yield of 7.5ton/ha after the training. In 2015 the yield used to be 1.7ton/ha”



I grow rice in irrigation scheme during the rainy season with supplemental irrigation. While in dry season, I cultivate rice fully depending on irrigation. Maize and bambaranuts are grown under rain-fed in the upland fields.



I understand what we are supposed to do in irrigation scheme management. Together with my family, I participated in canal cleaning and maintenance work.

Increased transparency of the collected irrigation fee in spending stimulated us to contribute for irrigation scheme management. After the training, payment of irrigation service fees is much smoother and is eagerly paid than before. Now, members are contributing one bag (95kg) of paddy per acre for water fees and membership fee for irrigation management.

Ms. Amasidze Kosamu Kadwame

"I used to fetch water by using a bucket to water the crops. Now I use gravity flowing water from irrigation canal."

I grow maize twice a year under irrigation and beans under rain-fed condition. The yield of maize and beans has increased to 7.5t/ha from 2.5t/ha and to 1t/ha from 0.5t/ha respectively, since the construction of irrigation facility.

I have constructed a new house with four bedrooms and installed electricity, bought 20 chickens for poultry keeping, pay school fees for my children up to form four secondary education.



Mr. Kasala Nasani Mihambo

“After the training, I understand that I have to pay irrigation service fees to enjoy the assured supply of irrigation water to my field. We use the collected service fee for the operation and maintenance of the irrigation scheme.”



I improved my farming practice after the training on Irrigation scheme management. I shared what I learnt, such as the benefit of O&M, water distribution planning for improvement of water availability in the field and its result of better crop yield.

After the training, I understood the right amount of water I need for the crop. Before, I was using too much water to grow rice. Now, each farmer gets their share of water. We practice irrigation water rotation to allow each farmer to get water for irrigation equally. The system of water sharing is good to farmers as it does not require a farmer to spend longer time to search for water, since water is distributed by a water master. This system has reduced conflicts over water use and its accessibility is very easy now.

I pay irrigation service fees at a rate of 5% of an average yield per acre in accordance with CGL. I also participate in Irrigators Organization (IO) meetings to contribute to the decision for the IO related activities. We use the collected service fee for O&M of the irrigation scheme, including payment for casual labourers for cleaning or repairing canals and other payment to maintain the facility.

Rice production increased and I paid school fees for my children and bought cattle, chickens, a motor cycle and built a nice house for my family.

**Anyone can be a next model farmer!!
Let's take an action for joining those successful farmers
to enjoy long term benefits. Irrigation technical supports
are available at LGA offices or NIRC regional offices.**



Ms. Fransisca Maulid Hongole, Mkombilenga Scheme, Iringa Region

“Now, the yield from the irrigated plot has increased and I bought a power tiller.”

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Photo on the front page: Mr. Joseph Kizwalo Simon, Nyida Irrigation Scheme, Shinyanga Region