MINUTES OF MEETING
ON
THE MID-TERM REVIEW
ON
TECHNICAL COOPERATION
IN
SUPPORTING SERVICE DELIVERY SYSTEMS OF IRRIGATED AGRICULTURE
UNDER
THE AGRICULTURAL SECTOR DEVELOPMENT PROGRRAMME (ASDP)
IN
THE UNITED REPUBLIC OF TANZANIA

The Japanese Mid-Term Review Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Hirofumi Hoshi, reviewed the progress of the Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture (hereinafter referred to as "the TC") from 26 September to 14 October, 2009 together with the Tanzanian Mid-Term Review Team in the form of joint review.

The Joint Mid-Term Review Team (hereinafter referred to as "the Team"), which consists of four members from JICA and three members from the Government of Tanzania, was organized for the purpose of conducting the mid-term review and for preparation of necessary recommendations to the respective governments.

After intensive study and analysis of the activities and achievements of the TC, the Team prepared the Joint Mid-Term Review Report (hereinafter referred to as "the Report"), and presented it to the Joint Coordinating Committee (hereinafter referred to as "the JCC").

The JCC discussed the major issues pointed out in the Report, and agreed on the matters referred to in the document attached hereto.

Dar es Salaam, 21 Oct ober, 200 9

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Major Points Discussed

1. The Team presented the Report to the JCC meeting held on 12 October, 2009, and the JCC approved the Report. The Report is in APPENDIX 1.

2. The modification of the logical framework was proposed by the Team, because some of the indicators and expressions were not appropriate for monitoring and evaluating the TC. Both the Tanzanian and Japanese sides agreed to modify the logical framework as proposed in the Report. The logical framework agreed is in APPENDIX 2.

3. The Team recommended to Ministry of Agriculture, Food Security and Cooperatives (MAFC) to facilitate the relevant official functionaries to promote and speed up the necessary processes for the variety registration, which will bring ben efits to farmers through future dissemination of the variety. MAFC agreed to take every possible measure to promote the variety registration.

4. For further promotion and implementation of the training under District Agricultural Development Plans (DADPs), the Team recommended to Kilimanjaro Agricultural Training Center (KATC) and Ministry of Agriculture Training Institutes (MATIs) to make further efforts to closely monitor and evaluate the training to maximize its effectiveness and positive impacts.

APPENDIX 1: Joint Mid-Term Review Report
APPENDIX 2: Logical Framework (as of 12 October, 2009)

APPENDIX 1

Joint Mid-Term Review Report

on

Technical Cooperation

in

Supporting Service Delivery Systems of Irrigated Agriculture

under

The Agricultural Sector Development Programme (ASDP)

Dar es Salaam, 12 October, 2009

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Abbreviations

ARI	Agricultural Research Institute
ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
DADP	District Agricultural Development Plan
DALDO	District Agricultural and Livestock Development Officer
DED	District Executive Director
DIDF	District Irrigation Development Fund
GoJ	The Government of Japan
GoT	The Government of Tanzania
IFs	Intermediate Farmers
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
KATC	Kilimanjaro Agricultural Training Center
KATI	Kizimbani Agricultural Training Institute
KARS	Kizimbani Agricultural Research Station
KATRIN	Kilombero Agricultural Training and Research Institute
KFs	Key Farmers
L/F	Logical Framework
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MATI	Ministry of Agriculture Training Institute
NERICA	New Rice for Africa
PO	Plan of Operations
SC	Steering Committee
TG	Task Group
ZITSU	Zonal Irrigation and Technical Services Units

1. Outline of the Mid-Term Review

1-1. Objectives of the Mid-Term Review

The objectives of the mid-term review are as follows:

(1) To visit the sites of the Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture (hereinafter referred to as "the TC"), to review the TC's activities and progress, and to exchange opinions with the Tanzanian authorities concerned.

(2) To make comments and advice on the plan of activities based on the results of the review.

(3) To prepare revised Logical Framework (hereinafter referred to as "the L/F") in order to properly monitor the progress and activities of the TC, if necessary.

(4) To participate in the Joint Coordinating Committee (hereinafter referred to as "the JCC") in order to present and discuss the result of review with the Tanzanian authorities concerned.

1-2. Schedule of the Mid-Term Review

The mid-term review was undertaken from 26 September, 2009 to 14 October, 2009.

The schedule is attached as Annex 1.

1-3. Members of the Mid-Term Review Team

The mid-term review was conducted by the Joint Mid-Term Review Team (hereinafter referred to as "the Team"), composed of both Japanese and Tanzanian review team members. The members of the Team are as follows:

(Japanese side)

1. Dr. Hirofumi Hoshi	Team Leader	Director, Eastern and Southern Africa Division, Rural Development Department, Japan International Cooperation Agency
2. Mr. Toru Sugawara	Rice Irrigation	Senior Officer, Disaster Prevention and Restoration Division, Rural Development Bureau, Ministry of Agriculture, Forestry and Fisheries
3. Ms. Keiko Itagaki	Evaluation Analysis	Researcher, Global Link Management, Inc.
4. Ms. Akiko Miyashita	Cooperation Planning	Program Officer, Eastern and Southern Africa Division, Rural Development Department, Japan International Cooperation Agency

(Tanzanian Side)

1. Mrs. Stella K.L. Mutagwaba	Principal Agricultural Tutor, Department of Training, Ministry of Agriculture, Food Security and Cooperatives
2. Eng. Stephen S. Kamugisha	Senior Agricultural Engineer, Morogoro Zonal Irrigation and Technical Service Unit, Ministry of Water and Irrigation
3. Mr. Sospeter H. Nyanda	Economist, Department of Policy and Planning, Ministry of Agriculture, Food Security and Cooperatives

1-4. Method of the Mid-Term Review

The TC was reviewed jointly by the Japanese and Tanzanian sides. Both sides examined the L/F of the TC. The L/F is a summary table of the overall description of the TC with its objectives, activities and environments.

Both sides confirmed the progress of the TC in terms of its purpose, outputs, activities and inputs stated in the L/F. Both sides reviewed the progress based on the five criteria, namely, Relevance, Effectiveness, Efficiency, Impact, and Sustainability. The descriptions of these criteria are given below:

1) Relevance	The relevance is a measure for determining whether the outputs, the purpose and the overall goals of the TC are still in line with the priority needs and concerns at the time of review.
2) Effectiveness	The effectiveness is concerned with the extent to which the purpose of the TC has been achieved, or is expected to be achieved, in relation to the outputs produced by the TC.
3) Efficiency	The efficiency is a measure for productivity of the implementation process: how efficiently the various inputs are converted into the outputs.
4) Impact	The impact is intended or unintended, direct or indirect, positive or negative changes that occur as a result of the TC.
5) Sustainability	The sustainability is a measure for determining whether or not the outcomes of the TC are likely to continue after the TC comes to an end.

2. Outline of the Technical Cooperation (TC)

2-1. Background of the TC

Agriculture is a key industry of Tanzania. It employs over 70% of the total working population and yields 42.5% of the country's gross domestic product (GDP) in 2008. Its growth, however, is suppressed, owing to such problems as low agricultural productivity and underdeveloped distribution system of agricultural products. To address this situation, the Government of Tanzania (hereinafter referred to as "GoT") completed Rural Development Strategy (RDS) and the Agricultural Sector Development Strategy (ASDS) in November 2001. In 2004, GoT formulated the Agricultural Sector Development Programme (ASDP) as the implementation vehicle of these strategies, and the ASDP basket fund was officially launched in 2006, which were originally funded by European Union (EU), International Fund for Agricultural Development (IFAD), Irish Aid, Japan International Cooperation Agency (hereinafter referred to as "JICA") and the World Bank.

In ASDP, GoT targets irrigated agriculture as a top priority and aims to improve agricultural research and extension services for highly profitable crops. However, in the ASDP Programme Document, the specifics of the agricultural service delivery system have not been clearly designed. In addition, districts often do not have enough capacities required for providing extension services independently.

Japan has a long history of cooperation with Tanzania in the field of agricultural development, having implemented since the 1970s a variety of cooperation undertakings promoting the establishment of irrigated rice cultivation techniques and related technical support. The cooperation succeeded in producing yields of 6 t/ha, three times larger than the national average in the Lower Moshi Irrigation Scheme in the Kilimanjaro Region. After the success in Lower Moshi, technical cooperation expanded nationwide. As the result, 1,031 rice cultivation technicians (extension officers, irrigation technicians and key farmers) have been trained, while the average yield of farmers who received training in six model sites located in various parts of the country has increased by about 40%, from 3.1 t/ha to 4.3 t/ha.

The outcomes of these cooperation activities were highly appreciated by GoT, which requested to the Government of Japan (hereinafter referred to as "GoJ") a new technical cooperation for improving rice productivity in about 150 irrigation schemes nationwide, and promoting extension services for irrigated agriculture at the national, local and farm levels.

In response to this request, the Preparatory Study Team was dispatched in 2006 and the framework of the TC was officially agreed between JICA and the Tanzanian authorities concerned with the signing of the Record of Discussions on May 8, 2007. The TC started on June 12, 2007, which will be ended on June 11, 2012.

2-2. Summary of the TC

The grand design of the TC is drawn in the L/F (attached as Annex 2), which was prepared on 27 February, 2009 as Version 3.0. Its summary is as follows.

Table 2-1: Summary of the TC

Overall Goals	1. The TC contributes to ASDP objectives of improving and expanding irrigated agriculture. 2. Profitability and incomes of smallholder rice farmers are increased.
Purpose	Productivity of rice cultivation in priority irrigation schemes is increased through strengthening service delivery systems of irrigated agriculture.
Outputs	1. Rice cultivation practices are improved in priority irrigation schemes through the Farmer-to-Farmer extension approach. 2. Cooperative linkages between Research, Training and Extension Institutions are strengthened for improving rice productivity.

2-3. Duration of the TC

Five years from 12 June, 2007 to 11 June, 2012.

2-4. Implementing Agencies of the TC

KATC, other Ministry of Agriculture Training Institutes (MATIs) (Igurusi, Ilonga and Ukiriguru), Kilombero Agricultural Training and Research Institute (KATRIN) and Agricultural Research Institutes (ARIs) (Uyole, Dakawa, Naliendele and Ukiriguru).

2-5. Target Area of the TC

Forty (40) irrigation schemes in Tanzania Mainland[1].

2-6. Target Groups of the TC

Smallholder rice farmers (15,000 farmers).

3. Achievements and Implementation Processes

During the mid-term review, the performance including inputs and outputs, as well as the implementation processes of the TC were reviewed in order to assess the degree of achievements, the results of which are described in the following:

3-1. Achievements of the TC

3-1-1 Inputs

The Team confirmed that the TC had availed the following inputs along with the plan stated in the L/F and the Plan of Operations (PO) (attached as Annex 3).

[1] The inclusion of Zanzibar in the TC has been agreed at the 2nd JCC meeting held in September 2008, and some of the proposed activities have already been undertaken in Zanzibar, which is still to be officially endorsed.

[Japanese side]

1) Dispatch of experts to Tanzania

4 long-term experts and 4 short-term experts in the following fields of expertise have so far been dispatched to the TC for technology transfer. The details of the Japanese experts are as shown in the following Table 3-1.

Table 3-1: List of Japanese Experts

Name	Field of Expertise	From	To
<Long-term Experts>			
Mr. Motonori Tomitaka	Chief Adviser	12/06/2007	11/06/2010
Mr. Nobuaki Oizumi	Coordinator/Rice Cultivation/Farm Management	15/07/2007	14/07/2010
Mr. Takayoshi Iemoto	Irrigation/Farmers Training	12/06/2007	11/06/2010
Dr. Nobuhito Sekiya	Upland Rice Cultivation/Research[2]	17/11/2008	16/11/2010
<Short-term Experts>			
Ms. Tomoko Enoki	Gender	08/02/2008	07/05/2008
Ms. Noriyo Aoki	Gender	07/09/2008	05/12/2008
Mr. Kenji Tamura	Irrigation Scheme Management	12/01/2009	22/03/2009
Mr. Yoshihiro Ban	Marketing and Rural Economy	22/09/2009	20/12/2009

Source: Documents prepared by the TC for the period up to the end of September 2009

2) Provision of machinery and equipment

Machinery and equipment of a total value equivalent to 393,786,723 Tanzanian Shillings have so far been provided for the TC activities. The details of the machinery and equipment are shown in Annex 4.

3) Training of Task Group members in Japan

So far, 16 Task Group (TG) members were dispatched to Japan for academic programmes and training courses on the subjects relevant to the scope of the TC activities, such as "Upland Variety Selection Techniques for Sub-Sahara Africa," "Empowerment of Rural Women," "IT System Techniques for Agriculture," and so forth. The details of the TG members' training in Japan are found in Annex 5.

4) Bearing of local costs

A total amount of 801,361,258.50 Tanzanian Shilling has been provided to supplement a portion of local expenditure for the TC for JFY 2007 – 2009, the details of which are indicated in the following Table 3-2.

[2] In the original plan, this field of expert was to be on short-term assignment, which was replaced with the long-term expert so as to accelerate and further promote the rice research component of the TC.

Table 3-2: Local Expenses born by the Japanese Side (Tanzanian Shillings)

FY (*1) / Budget items	2007	2008	2009 (*2)	Total
Running costs	280,208,802	382,503,902	26,240,065	688,952,769
Standard training	16,992,300	24,984,750	12,104,850	54,081,900
Multi-location trials	23,287,060	35,039,530	0	58,326,590
Total	320,488,161.50	442,528,182.00	38,344,915.00	801,361,258.50

(*1) Figures are based on the Japanese Fiscal Year (April – March).
(*2) Figures are based on the accounts settled by the end of June 2009.
Source: Documents prepared by the TC

[The Tanzanian side]

1) Appointment of the TG members

A total of 92 TG members have been assigned to the TC, i.e. 9 from MAFC (including 2 persons retired and 1 person transferred), 30 from KATC (including 3 persons retired and 3 persons currently on study leaves), 16 from MATI-Igurusi, 11 from MATI-Ilonga, 12 from MATI-Ukiriguru, 8 from KATRIN (including 3 on study leaves), 2 from ARI-Uyole, 1 from ARI-Dakawa, 2 from ARI-Naliendele, and 1 each from ARI-Ukiriguru. As the TC activities are also to cover the target area in Zanzibar, there are 11 TG members from Zanzibar, i.e. 8 from Kizimbani Agricultural Training Institute (KATI), 2 from Kizimbani Agricultural Research Station (KARS) and 1 from Matangatuani Research Station in Pemba. The details of the TG members are found in Annex 6.

Aside from these TG members, the TC enjoys active involvement of and collaboration from the collaborating agencies, i.e. Zonal Irrigation and Technical Services Units (ZITSU) and district officers, for various activities of the TC.

2) Allocation of the operation fund

The collaborating districts have allocated funds for the 7 standard training completed by the time of the review. The amounts of their cost sharing range from 140,000 to more than 17,000,000 Tanzanian Shillings, comprising from 16 to 93% of the cost incurred for the training in respective districts. To date, a total amount of 87,325,600 Tanzanian Shillings has been allocated by the districts, which is equivalent to about 62% of the entire costs of the standard training. The detailed breakdown of the cost sharing is indicated in Annex 7.

3) Provision of facilities

The necessary office spaces with office equipment, water and electricity facilities have been provided at MAFC and KATC. The training facilities and fields at KATC and 3 MATIs are provided and utilized for the residential training.

3-1-2 Achievements of the Outputs

It has been confirmed that the TC implemented the activities as per the plan stipulated in the L/F and PO with slight modifications, which are considered appropriate. The TC has so far

implemented the activities without notable delays or unprecedented difficulties, thus it is generally assumed that the TC would come up with most of its expected outputs by the end of the cooperation period.

Output 1: Rice cultivation practices are improved in priority irrigation schemes through the Farmer-to-Farmer extension approach.

Indicators:

1-1. Number of meetings and field days held among irrigation scheme staff, key farmers, intermediate farmers, etc.

1-2. Number of rice cultivation technology adopted by the farmers (men/women) in the irrigation schemes.

1-3. Number of training materials produced for gender training and participation rate of woman farmers.

Activities and Achievements:

The TC has so far completed the set of standard training in 7 irrigation schemes among 9 irrigation schemes[3] where the training activities have been initiated. Field day activities are to be organized at the third infield training session, with participation not only of the scheme staff, Key Farmers (KFs) and the Intermediate Farmers (IFs), but also of the other farmers in those irrigation schemes. In the 7 field days so far held, a total of 1,284 farmers other than the KFs and IFs have participated.

As for the adoption of rice cultivation technologies, it was found in the monitoring record from Kitivo scheme, Lushoto District, that out of the 44 techniques monitored, 14 techniques were adopted by more than 50% of KFs, while 10 techniques were adopted by more than 50% of IFs. Although such data were not yet available in the training reports from other schemes, it is generally assumed that farmers adopt the major basic techniques and improve rice cultivation practices.

The training materials for newly formulated subject matter training courses on gender and on irrigation scheme management are currently in compilation. Also, all of the training materials for standard training that had been developed by the foregoing KATC-II Project are in the process of modification and updating, including the visual aid materials such as flipcharts and power point presentations.

The participation rates of women farmers by the time of review are about 49% among the KFs and about 51% among the IFs in the standard training where the TC sets conditionality on participant selection[4]. As for the subject matter training, the participation rate of women reaches about 44%.

The details of the training conducted and participants are shown in the Annex 8.

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[3] In one scheme, the district could not bear their cost sharing after the baseline survey session funded by the TC. In another scheme, there was the drought after the 1st in-field training session, thus the rest of training was suspended.

[4] The figures for the KFs is based on the participation in the residential training, while the figure for the IFs is based on the average attendance in all of the four infield training, as the daily attendance in each day varies.

Output 2: Cooperative linkages between Research, Training and Extension Institutions are strengthened for improving rice productivity.

Indicators:

2-1. Number of the training implementation under DADPs.

2-2. Number of meetings and technical seminars conducted among the stakeholders.

2-3. Number of rice varieties (lines) submitted to the variety release committee.

Activities and Achievements:

By the time of the review, the TC has conducted 7 standard training among which 6 were covered under the DADPs of respective districts with their cost sharing. As it is currently planned that 12 standard training will be conducted for the year 2009/2010 under DADPs, it is assumed that the achievement of this indicator would be fairly high.

The TC has organized 5 workshops and a training for rice researchers, crop tutors and extension officers, as well as the study tours to Uganda and Zanzibar in order to facilitate knowledge sharing and exchange of experiences among them. During the interviews, it was shared to the review team that such occasions were quite useful for the participants to refresh their knowledge on rice research.

With the support of the TC, on-farm trails of rice varieties including NERICA have been implemented in KATRIN and 4 participating ARIs, the details of which are shown in the Table 3-3 below.

Table 3-3: On-farm trials for NERICA

Research Institute	Place	Farm	Control (Local Check)
KATRIN	Matombo	4	Lunyuki
	Chilombora	4	Gombe
ARI-Uyole	Kyela	4	Kilombero
ARI-Naliendele	Nachingwea	4	Ngwindimba
	Kinyope	1	Ngwindimba
	Naliendele	4	Ngwindimba
ARI-Dakawa	Korogwe	4	Borakupata
ARI-Ukiriguru	Ochuna	3	Kalamata
	Mogabiri	3	Kalamata
	Ukerewe	1	Sindano

Note: Six (6) NERICA varieties (1, 2, 3, 4, 7, WAB 450-12-2-BL1-DV4) are compared with local varieties.
Source: Document prepared by the TC

Although the appropriate data were not obtained from some of the trials due to the climatic reasons, the preparation for the application is progressing. Since this activity has started earlier than the original schedule, it is expected that the adequate measures will be taken to realize timely submission of registration application to the variety release committee in due course of the TC implementation.

3-1-3 Prospects to Achieve the Purpose of the TC

It is still too early to assess the precise prospect on achievement of the purpose of the TC at

this stage, as the total number of training conducted so far is yet one forth of the target figure and there should be more activities to be implemented for the later half of the cooperation period. Nonetheless, it is generally assumed that the prospect of achieving the purpose of the TC is fairly high, based on the following observations.

Purpose: Productivity of rice cultivation in priority irrigation schemes is increased through strengthening service delivery systems of irrigated agriculture.

Indicators:

1. Increased rice yield per unit area in the irrigation schemes.
2. Increased areas of fields for rice cropping in the irrigation schemes.

Prospects to Achieve the Purpose of the TC:

It was mentioned in the training reports by KATC and MATIs on the monitoring and planning session of the standard training that the yields of rice have increased in the irrigation schemes as shown in the Table 3-4 below:

Table 3-4: Comparison of yields of common farmers between the baseline and monitoring survey data

Training Institute	Irrigation Scheme	District	Yield 2007/08 (t/ha)	Yield 2008/09 (t/ha)
KATC	Kitivo	Lushoto	2.9	5.1
MATI-Igurusi	Ruanda Majenje	Mbarali	2.1	3.4
	Sakalilo	Sumbawanga	3.6	4.9
MATI-Ilonga	Kiroka	Morogoro Rural	2.4	3.2
	Ilonga	Kilosa	3.2	5.3
MATI-Ukiriguru	Titye	Kasulu	2.0	3.0

Source: Report to the 5th Steering Committee (Document prepared by the TC)

In the interviews, the participating farmers also unanimously shared with the review team with appreciation that there has been considerable increase of the rice yields. It is thus anticipated that the yield increase would very likely be attained.

As for the increase of the areas of field for rice cropping, no data was available at the point of the review. However, it was reported that in some areas where the training was conducted, a small number of farmers started double rice cropping in a part of their plots. Another possible contribution of the TC to the increase of rice cultivation areas is the promotion of new rice varieties including NERICA, which is yet to be in the process for registration. As the TC does not have control over the physical structures and facilities of irrigation in the target schemes, the appropriateness of this indicator become a question in the review discussion, which would be reflected to the proposed revision of the L/F.

3-2. Implementation Processes of the TC

(1) Decision making and operational mechanism

The JCC has so far been held twice to review the progress of activities, to confirm the plans

for the upcoming period, and to discuss other issues related to the implementation of the TC. Aside from the JCC, the TC has organized bi-annual Steering Committee (SC) meetings as coordination and monitoring mechanism of the TC. As for the training, the TG members in KATC and each MATI hold meetings among them for planning, preparation, operation and feedback throughout the training period. There are also occasions in which the TG members in respective fields of expertise get together to discuss the issues in the specific subjects of training, such as gender, irrigation scheme management and so forth, particularly when the Japanese short-term experts are working in the TC. As for the research component, coordination is done by the Rice Research Programme to facilitate the operational linkages among the TG members. There is no regular meeting among the TG members in ARIs, as there are only a small number of TG members at each ARI. The communication among the TC personnel has relatively been smooth, despite of the scattered locations of the implementing agencies. Some personnel, however, pointed out that the communication through e-mails, telephone and mobile phone calls were not functioning well enough in the initial stage of implementation of the TC.

(2) Coordination and collaboration with districts

In its initial stage, the TC personnel had visited the districts where the potential irrigation schemes for training are located, and then organized the workshops to identify the possible target schemes by inviting the relevant stakeholders from these districts, such as District Executive Directors (DEDs), District Agriculture and Livestock Development Officers (DALDOs), irrigation scheme officers and farmer representatives. In the workshop, the framework of the TC and contents of training to be conducted were also explained, which was helpful to draw interests among the district stakeholders and mobilize their commitments.

4. Results of the Review

4-1. Results of the Review based on the Five Criteria

Through the review study, the relevance, effectiveness, efficiency, impact and sustainability of the TC are assessed, the major findings of which are described below.

4-1-1 Relevance

The relevance of the TC is evaluated as high based on the following confirmation:

(1) Relevance to the development policies and sector programmes of GoT

The TC is still consistent with the policies of GoT, as there has not been any major change in the National Strategy for Growth and Poverty Reduction (NSGPR: 2005-2010) which regards the agricultural sector as the major pulling force. The ASDS also continues aiming at establishment of the enabling environment for improving agricultural productivity and profitability, and for improving farm incomes. Furthermore, MAFC has formulated the National Rice Development Strategy (NRDS) in 2009, which sets the target to double the rice

production over the coming 10 years with various measures including irrigation development, increase of productivity through enhancement of extension and dissemination of technologies to the farmers. The scope of the TC is thus evaluated as well in line with these policy directions.

(2) Consistency with the ODA policies of GoJ

"Promotion and enhancement of productivity and competitiveness" is one of the three pillars of the Japanese ODA policy as has been stipulated in the Country Assistance Program for the United Republic of Tanzania formulated in June 2008. In the Program, agriculture is considered as the nucleus of Tanzania's economic growth and one of the key factors in poverty reduction. Similarly, the Country Program of JICA for Tanzania emphasizes the importance of agricultural sector, and the TC is assumed to contribute to its Agricultural Sector Development Programme (ASDP). Moreover, GoJ has announced its official commitment to support the initiatives to increase the rice production in Africa, i.e. one of the agenda agreed upon at the Fourth Tokyo International Conference on African Development (TICAD IV) in 2008, and has taken active lead in the Coalition of African Rice Development (CARD). From these viewpoints, relevance of the TC to the directions of the Japanese aid policies is assessed as high.

(3) Relevance of project design

Improvement of the rice cultivation practices, i.e. the output 1 of the TC, is to contribute directly to the attainment of the purpose of the TC, which is the increase of the productivity. The enhancement of capacities and linkages among the relevant research, training and extension institutions is deemed to be essential to further promote rice production in future. As efforts are being made by other relevant authorities to improve irrigation infrastructures, the TC addresses the issues of productivity by combining training and research components, which is considered as practical and appropriate means to contribute to the attainment of the purpose of the TC.

It was however noted in the course of discussions that the outcomes of the activities for the output 2 are more to strengthen the capacities of relevant institution as technical agencies, rather than to strengthen the cooperative linkage. Thus any modification of the expression of the output 2 may be needed to further clarify the logical sequence between the activities and the expected output.

(4) Relevance to the needs of target beneficiaries

The farming practices of smallholder rice farmers are generally observed as of low-investment and subsistent nature, without application of proper rice cultivation technologies. Most of the smallholder rice farmers has not had much opportunities to be exposed to the improved practices, resulting their rice productivity to remain low. In such context, the farmers and relevant personnel of the districts very much appreciated the training under the TC. It was also shared in the interviews that the new techniques of rice cultivation

have already brought about notable increase of yields, and that the farmers are eager to cultivate more. It is thus understood that the contents and focus of the TC activities have adequately addressed the needs of the beneficiaries, although the research component of the TC has not yet brought any direct effect to the target beneficiaries by the time of the review.

4-1-2 Effectiveness

The effectiveness of the TC is considered as high based on the following analysis:

(1) Prospects to achieve the purpose of the TC

The purpose of the TC is to increase the productivity of rice cultivation in priority irrigation schemes. Through the training activities of the TC, application of improved techniques and fair increase of yield have been reported. There will be more favorable changes once the research activities of the TC would come up with their expected outcomes, i.e. registration and dissemination of new rice varieties, compilation and distribution of technical guidelines on rice production, and so forth. Therefore, the prospect of achieving the purpose of the TC seems to be high.

(2) Contribution of outputs to the achievement of the purpose of the TC

It was reported in the irrigation schemes where the training has so far been implemented that the rice cultivation practices of smallholder rice farmers have been improved and that their rice yields have increased. Since other conditions of their farming such as land areas and irrigation facilities have not been changed, the contribution of output 1 to the purpose of the TC is confirmed to a certain extent. Since the efforts to register new rice varieties and to prepare the guidelines for rice production are yet to bring tangible results, it is not possible to assess the degree of contribution of output 2 at the time of the review.

(3) Analysis of factors

1) Promoting factors

Due to the physical distances among the implementing agencies and the large number of TG members, it is hardly possible for the TG members to frequently meet as a whole group. The TC thus has consciously organized various occasions for the TG members from KATC and MATIs to meet, discuss and learn together, such as stakeholder workshops and seminars, meetings among the TG members in specific fields upon assignments of Japanese short-term experts, and so forth. The TG members have also been invited in turn to the SC meetings to report their respective activities. These occasions not only served as chances for sharing of experiences, but also created a sense of competition in a good manner among the TG members from participating MATIs. This seems to have become a positive drive to bring better results and thus has contributed to the smooth implementation of the TC.

Another factor to be noted is the inputs from the Rural Agricultural Development Advisory Group (RADAG) of JICA, which provided support to the entire process of ASDP implementation. The TC could foster the awareness of the districts on training on rice

production through the stakeholders' workshop, and succeed to integrate the training in the DADPs. This was made possible because of the detailed information and proper suggestions obtained from the RADAG on the system of DADP and its implementation processes. Such linkages within a sector programme have contributed to the effectiveness of the TC.

2) Hampering factors

For the implementation of the training, the collaborating districts have allocated considerable amount of funds under their DADPs. However, there have been several cases in which actual disbursement of the committed funds has delayed. Since the series of sessions in the standard training are planned in line with the cropping season and bound to the timing of actual production activities, delays in fund disbursement negatively affected the conducts of the standard training.

(4) Important assumptions

There has not so far been any notable influence caused by the changes of the important assumptions.

4-1-3 Efficiency

The efficiency of the TC is assessed as high based on the results of the examination on the following aspects:

(1) Japanese experts

The timing and numbers of Japanese experts were considered appropriate. Despite of the conditions where the experts are stationed separately at MAFC and KATC and scattered location of the implementing agencies, it is observed that the experts are playing their expected roles.

(2) Machinery and equipment

The machinery and equipment required for the TC activities and technical transfer have duly been provided as per scheduled. The TG members and other relevant personnel at KATC, MATIs and ARIs are capable of handling these machinery and equipment by their own, and most of the equipment provided is properly utilized and kept in good conditions.

(3) Training of the TG members in Japan

Those who have attended the training in Japan generally assess that the duration and subjects of these training were adequate. They consider that their learning from the training has been helpful in carrying out not only the activities of the TC but also their regular duties in respective organizations.

(4) Inputs from the Tanzanian side

A sufficient number of the TG members from MAFC, KATC, MATIs and ARIs have been assigned in each field of the TC activities in accordance with the planned schedule. The TC has

also enjoyed active involvement of collaborating agencies. It is to be noted and appreciated that the districts have so far shouldered almost 62% of the training costs in total, though the rates of cost sharing vary among the different districts. The provision of the office spaces with basic equipment provided for the TC activities at MAFC and KATC, training facilities and fields for residential training at KATC and MATIs have contributed to the smooth implementation of the TC activities.

(5) Utilization of the outcomes and experiences of foregoing JICA technical cooperation projects

There had been a long history of Japanese technical cooperation projects in Kilimanjaro Region since late 1970s, and the irrigated rice production technologies had consistently been the main theme of these foregoing projects. Many of the TG members currently at KATC had participated in these foregoing projects. The precedent KATC II Project under JICA's assistance had developed the concept of the farmer-to-farmer extension approach with its main features embodied in the standard training. The package of the technologies taught in the training have already been tested and proven to be effective through the KATC II activities. The TC could start its activities on the basis of the technical knowledge and first-hand experiences accumulated through these past endeavors.

It is thus to be noted that utilization of the readily available human resources together with the tangible outcomes, such as the package of selected techniques, teaching notes and training materials for the standard training, have contributed to the efficiency of the TC to a considerable degree.

4-1-4 Impacts

The impacts of the TC is evaluated to be positive based on the following observations:

(1) Prospect of attaining the overall goals

One of the overall goals of the TC is the increased profitability and farm income of smallholder farmers in the forty (40) priority irrigation schemes, which would largely be attributed by the increased productivity. As is discussed in the previous section, the increase in productivity has been reported as the effect of training, and it is anticipated that the enhanced technical capacities of the research, training and extension institutions would further contribute to the increase in productivity of rice cultivation. A part of the monitoring data that were made available for this mid-term review also indicates favorable impacts to the income from rice production among the smallholder farmers.

Prospects of achieving another overall goal, i.e. the contribution of TC to the ASDP objectives, could not yet be assessed at the time of the review. The effects of the TC on the improvement of rice production practices have partially been observed so far at the levels of farmers in a limited number of irrigation scheme, and there has not been any basis to assess the overall impact on the irrigated agriculture.

Nevertheless, there seems to be a logical gap between the purpose of the TC and the overall goals: the increased rice productivity may not always lead to the increase of entire

farm income as direct attribute. The Team has also found that the baseline data collected by the TC in the training are concentrated on the information related to rice, not covering much of the other farming activities. Therefore, it was assumed that accurate calculation of profitability of smallholder farming activities as a whole may require enormous study, which is not included in the scope of the TC. As for the contribution of TC to the ASDP objectives, it was also considered that the tangible contribution of TC may be limited to the sphere of rice production, and not directly reach to the level to improve and expand the irrigated agriculture as a whole. Hence, possible modification of this part of the L/F was examined in this relation, which would be reflected to the proposed revision of the L/F.

(2) Positive impacts

It has been reported in the interview with the MATI-Ilonga that the TG members teach the basic rice cultivation technologies disseminated in the standard training to the diploma students studying there. The students have become interested and impressed by the results demonstrated in the training fields used for the residential training for farmers. The TG members also taught them how to fabricate push weeders; 69 students who would work in the rice growing districts as a part of the diploma programme went with these push weeders. As the diploma students are supposed to be involved in agricultural extension in future, their exposure to the technologies disseminated through the TC would have indirect but long-term effects to enhance their services to support smallholder rice farmers.

(3) Negative impacts

There has not been any negative impact observed or reported by the time of this mid-term review.

4-1-5 Sustainability

At the stage of the mid-term review, the sustainability of the TC is generally assessed as high in most of the aspects, but there are some reservations and remaining concerns as described in the following:

(1) Policy and institutional sustainability

The ASDS is the overall and comprehensive policy in agricultural sector in Tanzania, in which the irrigated agriculture is targeted as a top priority. Since the duration of the ASDP is set for 13 years from 2006 to 2018, it is assumed that the policy support would continuously be secured for the coming years. Also, the implementing agencies of the TC are officially recognized and mandated as specialized agencies for research and training to promote extension service delivery to the farmers. Furthermore, the KATC and MATIs are gaining more popularity as institutions offering farmers training among the districts in their geographical jurisdiction through the implementation of the TC. Therefore, the policy and institutional sustainability of the TC is assessed as high.

(2) Financial sustainability

The TC has conducted the training on the basis of cost sharing with the collaborating districts. Although the rate of cost sharing by the collaborating districts has so far reached to 62% of total cost incurred for the implementation of standard training, there is no funding from the implementing agencies. The TC currently shoulders the rest of the costs, which would no longer be available after the completion of the TC. Thus the financial sustainability from long-term perspectives is somewhat questionable at this point of time.

(3) Technical sustainability

The package of rice cultivation techniques introduced in the standard training of the TC is composed of the basic techniques that have been proven to bring positive results in the productivity through the past efforts at KATC. It has also been confirmed through 7 standard training so far been conducted in various districts under the TC that the level of adoption of these techniques are satisfactorily high. In addition, the farmers interviewed during the review were eager to continue the irrigation farming by their own in future. At the levels of MATIs, the TG members are confident to continuously carry out the standard training. Hence the technical sustainability is generally considered high as far as the standard training is concerned. Yet, some of the TG members have participated only in a part of the entire process of trainers' training conducted by KATC in the initial stage, thus any follow-up may be needed along with the actual implementation of the standard training by their own.

As for the subject matter training, two subject matter training courses have so far been formulated and implemented in some of the collaborating districts. Nonetheless, the data on the adoption of technical learning has not been available by the time of the review. The training materials on these already developed subject matter training are still in the finalization process, and training on more subject matters will be developed in the remaining period of the TC. Thus it is still early to properly assess the technical sustainability in terms of the subject matter training.

Similarly, it does not seem to be possible to evaluate the technical sustainability of the research component of the TC at the time of the review, because the technical effects and their sustainability would largely depend on the activities to be undertaken from now on.

4-2. Conclusion

The Team has confirmed that the TC has been implemented without any critical problem or notable delay, and the prospect of achieving most of its outputs by the end of the cooperation period is assumed as high. The Team thus concluded that the prospect of achieving the purpose of the TC is assessed as fair enough, given the TC should continue its efforts and properly address some of the issues and concerns identified through this mid-term review.

5. Recommendations

(1) Revision of the L/F

In the process of the review, discussion was held to set the target of the objectively verifiable indicators (OVI) in the L/F, based on the achievements so far made through the TC activities. In the course of discussion, some questions were raised in terms of the goal and outputs setting, indicators and activities stipulated in the current version of the L/F. It was noted that some modifications might be necessary to clarify the actual directions of the TC as well as to streamline the logical sequences of the design of the TC. Accordingly, it is recommended for the TC to further discuss and revise the L/F at this point of time. Major points for the proposed revision would center around on; 1) setting of the goal level, 2) adjustment of logical sequence between the output 2 and the activities, and 3) modification of some of the OVI for the outputs, purpose and overall goals of the TC. The proposed revision of L/F and the explanations on the major points are attached as Annex 9 and 10.

(2) Supports to speed up the procedures of registration of rice varieties

The TC has supported the efforts by research institutions on the new rice varieties including NERICA. In many of the irrigation schemes, irrigation facilities and structures are not fully functional, where the potentials of rice varieties with high drought resistance are fairly large. The TC has supported multi-location trials at participating ARIs, based on the results of which the application for official registration is in process. Once these potential varieties would be registered, the TC would proceed to undertake more activities for their dissemination, which will bring real effects at the level of farmer beneficiaries. Thus the Team recommends MAFC to take every possible measure to facilitate the relevant official functionaries to promote and speed up the necessary processes for the variety registration.

(3) Further dissemination of technologies through farmer-to farmer extension approach

In the standard training, the KFs are selected and obligated to disseminate their technical learning to other farmers in the community, and the KFs and IFs interviewed during the review have actively played their expected roles. However, such designation of KFs and IFs are given only in the context of the training, thus the continuation of such function would depend on the personal and voluntary will of individuals. In view of such informal and limited nature of the KFs and IFs, the TC includes as the participants in the standard training the leaders of irrigation schemes and district extension officers who have mandates to serve to the farmers in the area. They should be the ones to monitor and help the KFs and IFs to continue their functions in the community after the training.

It is therefore recommended for the TC to take any practical measures in collaboration with those district officers to ensure regular monitoring and planning of farming activities in the irrigation schemes, so that the improved rice cultivation technologies would further be disseminated to and continuously be applied by smallholder rice farmers.

(4) Further promotion and implementation of the training

It is recommended to the KATC and MATIs to make further efforts to closely monitor and evaluate the training to maximize its effectiveness and positive impacts. With such proven effects, it would be easier for them to further advertise their training services to the concerned stakeholders in the districts and to convince them to allocate more financial resources from the DADPs to the training. MAFC should also support the efforts by the KATC and MATIs in terms of public relations, further facilitation to draw interests on the training among the relevant stakeholders in the districts that are with high potentials of irrigated rice production.

(5) Measures to ensure the timely conduct of the standard training

Despite of fairly large portion of training costs shouldered by the collaborating districts, there is an issue in relation to the fund allocation by the districts for the training, i.e. the timing of disbursement, particularly for the standard training. As the standard training is to be conducted in accordance with the cropping calendar, the initial activities is optimally to be undertaken in the months of September to October, depending on the local conditions. The TC has already experienced some cases in which the disbursement of the already committed budget of the district delayed. It is thus recommended to the relevant offices of MAFC to start examining any feasible mechanism to cope up with the problem so as to ensure the timely conduct of the training.

Schedule of the Mid-Term Review

Sl.	Date	Day	Japanese Review Team			Tanzanian Review Team	Accommodation
			Dr. Hoshi (Team Leader)	Mr. Sugawara (Rice Irrigation) Ms. Miyashita (Cooperation Planning)	Ms. Itagaki (Evaluation Analysis)	Ms. Mutagwaba, Eng. Kamugisha, Mr. Nyanda	
1	9/26	Sat			Depart from Tokyo		
2	9/27	Sun			Arrive at Dar es Salaam (EK725 3:20PM)		Dar es Salaam
3	9/28	Mon			▪ Meeting at JICA Tanzania Office ▪ Meeting with Experts (Mr. Tomitaka, Dr. Sekiya)		Dar es Salaam
					▪ Courtesy call (c/c) to Director, MAFC, ▪ Joint Evaluation Team Meeting ▪ Interview with Task Group Members (TGM), MAFC		
4	9/29	Tue			▪ Visit to MATI-Ilonga ▪ Interview with TGM, MATI-Ilonga ▪ Visit to Ilonga Irrigation Scheme		Kilosa
5	9/30	Wed		Depart from Tokyo	▪ c/c to DED Kilosa District ▪ c/c to DALDO Kilosa District ▪ Visit to Seed Centre		Morogoro
6	10/1	Thu		Arrive at Dar es Salaam (EK725 3:20PM) Meeting at JICA Tanzania Office	▪ c/c to DED, Morogoro Rural District ▪ c/c to DALDO Morogoro Rural District ▪ Visit to Kiroka Irrigation Scheme Move to DSM		Dar es Salaam
7	10/2	Fri		Move to Kilimanjaro ▪ c/c to DED, Moshi District ▪ Visit to Lower Moshi Irrigation Scheme ▪ c/c to Principal, KATC ▪ Meeting with Experts (Mr. Iemoto, Mr. Oizumi) ▪ Interview with TGM, KATC			Moshi
8	10/3	Sat	Depart from Tokyo	▪ c/c to DED, DALDO, Monduli district			Mto Wa Mbu

				▪ Visit to Mahande Irrigation Scheme, Mto Wa Mbu	
9	10/4	Sun	Arrive at Dar es Salaam (EK725 3:20PM)	Move to Mwanza	Mwanza / Dar es Salaam
10	10/5	Mon	Move to Mwanza	Move to Ukiriguru	Mwanza
			▪ Visit to MATI-Ukiriguru ▪ Visit to ARI- Ukiriguru		
11	10/6	Tue	▪ c/c to Kwimba District - Visit to Mahiga Irrigation Scheme		Mwanza / Singida
			Back to Mwanza	Move to Singida	
12	10/7	Wed	Move to Dar es Salaam ▪ Meeting in Japanese Review Team, JICA office	Move to Dar es Salaam	Dar es Salaam
13	10/8	Thu	▪ Meeting with MAFC regarding TC activities in Zanzibar, rice research, etc ▪ Meeting with Experts, MAFC		Dar es Salaam
14	10/9	Fri	▪ Joint Review Team meeting, modification of the Minutes and the Report		Dar es Salaam
15	10/10	Sat	- Preparation of the Minutes and the Review Report		Dar es Salaam
16	10/11	Sun	▪ Preparation of the Minutes and the Review Report		Dar es Salaam
17	10/12	Mon	▪ C/C to Permanent Secretary, MAFC ▪ JCC meeting, Signing of the Minutes		Dar es Salaam
18	10/13	Tue	▪ Agriculture Sector Programme Coordinating Meeting ▪ Depart from Dar es Salaam (EK726 4:50PM)		
19	10/14	Wed	Arrive at Tokyo		

LOGICAL FRAMEWORK

Title: Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture

Prepared: 27 February, 2009 Version 3.0

Target Area: Forty (40) irrigation schemes in Tanzania Target Groups: Smallholder rice farmers (15,000 farmers)

Responsible Agency: TD and ARDD, MAFC

Implementing Agencies: KATC and other MATIs (Igurusi, Ilonga, and Ukiriguru), ARIs (Rice Research Programme)

Collaborating Agencies: ZITSUs and Districts

Duration: 2007 to 2012 (5 years)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goals 1. The TC contributes to ASDP objectives of improving and expanding irrigated agriculture. 2. Profitability and incomes of smallholder rice farmers are increased.	Increase of incomes among smallholder rice farmers Improvement of household budget among smallholder rice farmers	ASDP/DADP reports	
Purpose Productivity of rice cultivation in priority irrigation schemes is increased through strengthening service delivery systems of irrigated agriculture.	1. Increased rice yield per unit area in the irrigation schemes. 2. Increased areas of fields for rice cropping in the irrigation schemes.	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Farming Survey Report	Rice price is not drastically dropped. Farm inputs (e.g., fertilizers) are available and affordable for smallholders.
Outputs 1. Rice cultivation practices are improved in priority irrigation schemes through the Farmer-to-Farmer extension approach. 2. Cooperative linkages between Research, Training and Extension Institutions are strengthened for improving rice productivity.	1-1. Number of the training implementation under DADPs. 1-2. Participation rate of woman farmers in the training. 1-3. Number and contents of training materials produced. 1-4. Number of meetings and field days held among stakeholders of the irrigation schemes. 1-5. Number of rice cultivation technologies adopted by the farmers (men/women) in the irrigation schemes. 2-1. Number and contents of trainings and workshops conducted. 2-2. Number of rice varieties (lines) submitted to the variety release committee. 2-3. Number of rice promotion activities conducted by Districts and farmers.	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Ex-participants' report Farming survey report	Any serious natural disasters do not occur.
Activities 1-1. To identify priority irrigation schemes through dialogues with the stakeholders. 1-2. To provide Districts with technical support for planning training on irrigated rice production as part of DADPs. 1-3. To conduct trainers training. 1-4. To conduct the standard training (baseline survey, residential and infield training) with gender consideration. 1-5. To conduct subject matter trainings with gender consideration. 1-6. To monitor and evaluate the standard training and subject matter trainings. 2-1. To conduct trainings and workshops for the stakeholders. 2-2. To conduct on-station trials for rice varieties including NERICA. 2-3. To conduct on-farm trials for rice varieties including NERICA. 2-4. To provide Districts with technical support for promotion of rice extension. 2-5. To prepare basic guidelines on rice cultivation technologies.	**Inputs from Japanese Side** 1. Dispatch of experts (Long-term and Short-term) The experts with the following assignment titles and expertise will be assigned upon necessity: Chief Adviser, Coordinator, Rice Cultivation, Farm Management, Irrigation, Farmers Training, Upland Rice Cultivation and Research, Gender, Livelihood Improvement, Information Management, Post-harvest Processing, Marketing, and Irrigation Scheme Management. 2. Allocation of operational costs of the TC. 3. Provision of machinery and equipment. 4. Training of Task Group members in Japan and/or in third countries. 5. Improving field training facilities at MATI-Ilonga and MATI-Ukiriguru **Inputs from Tanzanian Side** 1. Assignment of Task Group members and administrative personnel. 2. Allocation of implementation costs for the TC such as salaries of task members and necessary expenses for training (DADP funds). 3. Provision of working spaces and necessary facilities for Japanese experts to perform their duties. 4. Farmer labour contribution to on-farm activities in the irrigation schemes.		Budget for capacity building at district levels does not substantially decrease. **Pre-condition** MAFC recognizes the necessity of cooperation between research, training and extension institutions. Security conditions in the target areas are maintained.

Plan of Operations: Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture (TC-SDIA; TANRICE)

Year: 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, 2012/13
Month: 6 7 8 9 10 11 12 1 2 3 4 5 …

No.	Activity
0	**Logistic supports for implementation of TANRICE are done.**
0-1	To prepare and review the plan of operation.
0-2	To plan, coordinate and implement the rehabilitation of training fields.
0-3	To plan, identify and procure necessary equipment.
0-4	To prepare receiving short-term experts and dispatching training participants.
0-5	To organize Steering Committee (SC) and Joint Coordinating Committee (JCC) meetings.
1	**Rice cultivation practices are improved in priority irrigation schemes through the Farmer-to-Farmer extension approach.**
1-1	To identify priority irrigation schemes through dialogues with the stakeholders.
1-1-1	To identify Districts where irrigation schemes for training are located.
1-1-2	To visit Districts where irrigation schemes for training are located.
1-1-3	To organise workshops for identifying the irrigation schemes for training.
1-1-4	To confirm target irrigation schemes for training at JCC.
1-2	To provide Districts with technical support for planning training on irrigated rice production as part of DADPs.
1-2-1	To negotiate with concerned Districts on schedule, cost and others for the standard training course.
1-2-2	To negotiate with concerned Districts on schedule, cost and others for subject matter training courses.
1-3	To conduct trainers training.
1-3-1	To build consensus among Responsible and Implementing Institutions.
1-3-2	To prepare and conduct trainers training for capacity building of tutors.
1-4	To conduct the standard training (baseline survey, residential and infield training) with gender consideration.
1-4-1	To build consensus on target schemes, periods and contents of the standard training course.
1-4-2	To collect and arrange teaching materials developed by KATC and distribute them to 3 MATIs.
1-4-3	To conduct the standard training course for KATC covering areas.
1-4-4	To conduct the standard training course for MATI-Ilonga covering areas.
1-4-5	To conduct the standard training course for MATI-Igurusi covering areas.
1-4-6	To conduct the standard training course for MATI-Ukiriguru covering areas.
1-4-7	To prepare and conduct the standard training course in Zanzibar.
1-4-8	To conduct demonstration/verification in training plots.
1-4-9	To renew common teaching materials for the standard training course.
1-5	To conduct subject matter trainings with gender consideration.
1-5-1	To identify subjects for conducting training.
1-5-2	To prepare and conduct subject matter training.
1-6	To monitor and evaluate the standard training and subject matter trainings.
1-6-1	To study and indentify indicators necessary for monitoring and evaluation.
1-6-2	To conduct monitoring on the standard training course.
1-6-3	To conduct monitoring on the subject matter training courses.
1-6-4	To conduct evaluation for the standard training course and subject matter training courses
2	**Cooperative linkages between Research, Training and Extension Institutions are strengthened for improving rice productivity.**
2-1	To conduct trainings and workshops for the stakeholders.
2-1-1	**To conduct trainings and workshops for implementers.**
2-1-2	**To conduct trainings and workshops for collaborators.**
2-2	**To conduct on-station trials for rice varieties including NERICA.**
2-2-1	**To support capacity building of rice researchers.**
2-2-2	**To support rice research and seed multiplication at KATRIN.**
2-2-3	To support rice seed multiplication in Zanzibar.
2-3	To conduct on-farm trials for rice varieties including NERICA.
2-4	To provide Districts with technical support for promotion of rice extension.
2-4-1	**To support demonstration of good performing rice varieties including NERICA.**
2-4-2	**To support seed multiplication of good performing rice varieties.**
2-5	To prepare basic guidelines on rice cultivation technologies.
2-5-1	**To prepare a guideline for multi-location rice variety trial.**
2-5-2	To prepare and renew irrigated rice cultivation guideline.
2-5-3	To prepare and renew upland rice cultivation guideline.

List of Machinery and Equipment

No.	Name	Model (Title)	Maker	Unit Price (JPY)	Unit Price (Tshs)	Unit Price (USD)	Qty.	Location	Remarks
1	Laptop Computer	Satellite A205	Toshiba			800	1	KATC	Good Condition
2	Software	Office2007	Microsoft			280	1	KATC	Good Condition
3	Color Laserjet Printer	Laserjet 1600	HP			360	1	KATC	Good Condition
4	UPS	650VA	APC			95	1	KATC	Good Condition
5	FAX	L100	Canon			510	1	KATC	Good Condition
6	Projector	1201MP	Dell			950	1	KATC	Good Condition
7	Grain moisture meter	Riceta m5	Kett	46,000			1	KATC	Good Condition
8	Yeild sampler		Fujiwara	72,000			1	KATC	Good Condition
9	Tubular Instrument Scale	100KG	SANKO	33,000			1	KATC	Good Condition
10	Motorcycle	NXR125	Honda		3,300,000		1	KATC	Good Condition
11	Vehicle	Landcruiser hardtop	Toyota	3,186,550			1	KATC	Good Condition
12	Laptop Computer	Satellite A205	Toshiba		800		1	MAFC	Good Condition
13	Software	Office2007	Microsoft		280		1	MAFC	Good Condition
14	Color Laserjet Printer	Laserjet 1600	HP		360		1	MAFC	Good Condition
15	UPS	650VA	APC		95		1	MAFC	Good Condition
16	FAX	L100	Canon		510		1	MAFC	Good Condition
17	Projector	1201MP	Dell		950		1	MAFC	Good Condition
18	Photocopier	IR3035	Canon			8,901	1	MAFC	Good Condition
19	Grain moisture meter	Riceta m5	Kett	46,000			1	MAFC	Good Condition
20	Yeild sampler		Fujiwara	72,000			1	MAFC	Good Condition
21	Tubular Instrument Scale	100KG	SANKO	33,000			1	MAFC	Good Condition
22	Laptop Computer	Satellite A205	Toshiba			800	1	MATI-Ilonga	Good condition
23	Software	Office2007	Microsoft			280	1	MATI-Ilonga	Good condition
24	Color Laserjet Printer	Laserjet 1600	HP			360	1	MATI-Ilonga	Good condition
25	UPS	650VA	APC			95	1	MATI-Ilonga	Good condition
26	Projector	1201MP	Dell			950	1	MATI-Ilonga	Good condition
27	Photocopier	IR3035	Canon			8,901	1	MATI-Ilonga	Good condition
28	Scanner	HP5590	HP			580	1	MATI-Ilonga	Good condition
29	Grain moisture meter	Riceta m5	Kett	46,000			1	MATI-Ilonga	Good condition
30	Yeild sampler		Fujiwara	72,000			1	MATI-Ilonga	Good condition

No.	Name	Model (Title)	Maker	Unit Price (JPY)	Unit Price (Tshs)	Unit Price (USD)	Qty.	Location	Remarks
31	Tubular Instrument Scale	100KG	SANKO	33,000			1	MATI-Ilonga	Good condition
32	Erectric Balance	PDS200n	Yamato	13,650			1	MATI-Ilonga	Good condition
33	Counter Scale	SD-10	Yamato	5,670			1	MATI-Ilonga	Good condition
34	Motorcycle	NXR125	Honda		3,300,000		1	MATI-Ilonga	Good condition
35	Digital Camera	DSC-W80	Sony		416,666		1	MATI-Ilonga	Good condition
36	Generator	Elemax SH3200	Honda		1,100,000		1	MATI-Ilonga	Good condition
37	Vehicle	Landcruiser hardtop	Toyota	3,186,550			1	MATI-Ilonga	Good condition
38	Laptop Computer	Satellite A205	Toshiba			800	1	MATI-Igurusi	Good condition
39	Software	Office2007	Microsoft			280	1	MATI-Igurusi	Good condition
40	Color Laserjet Printer	Laserjet 1600	HP			360	1	MATI-Igurusi	Good condition
41	UPS	650VA	APC			95	1	MATI-Igurusi	Good condition
42	Projector	1201MP	Dell			950	1	MATI-Igurusi	Good condition
43	Photocopier	IR3035	Canon			8,901	1	MATI-Igurusi	Good condition
44	Grain moisture meter	Riceta m5	Kett	46,000			1	MATI-Igurusi	Good condition
45	Yeild sampler		Fujiwara	72,000			1	MATI-Igurusi	Good condition
46	Tubular Instrument Scale	100KG	SANKO	33,000			1	MATI-Igurusi	Good condition
47	Erectric Balance	PDS200n	Yamato	13,650			1	MATI-Igurusi	Good condition
48	Counter Scale	SD-10	Yamato	5,670			1	MATI-Igurusi	Good condition
49	Motorcycle	NXR125	Honda		3,300,000		1	MATI-Igurusi	Good condition
50	Digital Camera	DSC-W80	Sony		416,666		1	MATI-Igurusi	Good condition
51	Generator	Elemax SH3200	Honda		1,100,000		1	MATI-Igurusi	Good condition
52	Bus	Coaster	Toyota	5,964,510			1	MATI-Igurusi	Good condition
53	Vehicle	Landcruiser hardtop	Toyota	3,186,550			1	MATI-Igurusi	Good condition
54	Laptop Computer	Satellite A205	Toshiba			800	1	MATI-Ukiriguru	Good condition
55	Software	Office2007	Microsoft			280	1	MATI-Ukiriguru	Good condition
56	Color Laserjet Printer	Laserjet 1600	HP			360	1	MATI-Ukiriguru	Good condition
57	UPS	650VA	APC			95	1	MATI-Ukiriguru	Good condition
58	FAX	L100	Canon			510	1	MATI-Ukiriguru	Good condition
59	Projector	1201MP	Dell			950	1	MATI-Ukiriguru	Good condition
60	Photocopier	IR3035	Canon			8,901	1	MATI-Ukiriguru	Good condition
61	Scanner	HP5590	HP			580	1	MATI-Ukiriguru	Good condition
62	Grain moisture meter	Riceta m5	Kett	46,000			1	MATI-Ukiriguru	Good condition

No.	Name	Model (Title)	Maker	Unit Price (JPY)	Unit Price (Tshs)	Unit Price (USD)	Qty.	Location	Remarks
63	Yeild sampler		Fujiwara	72,000			1	MATI-Ukiriguru	Good condition
64	Tubular Instrument Scale	100KG	SANKO	33,000			1	MATI-Ukiriguru	Good condition
65	Erectric Balance	PDS200n	Yamato	13,650			1	MATI-Ukiriguru	Good condition
66	Counter Scale	SD-10	Yamato	5,670			1	MATI-Ukiriguru	Good condition
67	Motorcycle	NXR125	Honda		3,300,000		1	MATI-Ukiriguru	Good condition
68	Digital Camera	DSC-W80	Sony		416,666		1	MATI-Ukiriguru	Good condition
69	Generator	Elemax SH3200	Honda		1,100,000		1	MATI-Ukiriguru	Good condition
70	Vehicle	Landcruiser hardtop	Toyota	3,186,550			1	MATI-Ukiriguru	Good condition
71	Laptop Computer	Satellite A205	Toshiba			800	1	KATRIN	Good Condition
72	Software	Office2007	Microsoft			280	1	KATRIN	Good Condition
73	Color Laserjet Printer	Laserjet 1600	HP			360	1	KATRIN	Good Condition
74	UPS	650VA	APC			95	1	KATRIN	Good Condition
75	Projector	1201MP	Dell			950	1	KATRIN	Good Condition
76	Photocopier	IR3035	Canon			8,901	1	KATRIN	Good Condition
77	Scanner	HP5590	HP			580	1	KATRIN	Good Condition
78	Digital Camera	DSC-W80	Sony		416,666		1	KATRIN	Good Condition
79	Grain moisture meter	Riceta m5	Kett	46,000			1	KATRIN	Good Condition
80	Yeild sampler		Fujiwara	72,000			1	KATRIN	Good Condition
81	Tubular Instrument Scale	100KG	SANKO	33,000			1	KATRIN	Good Condition
82	Erectric Balance	PDS200n	Yamato	13,650			1	KATRIN	Good Condition
83	Counter Scale	SD-10	Yamato	5,670			1	KATRIN	Good Condition
84	Motorcycle	NXR125	Honda		3,300,000		1	KATRIN	Good Condition
85	Digital Camera	DSC-W80	Sony		416,666		1	ARI-Dakawa	Good Condition
86	Grain moisture meter	Riceta m5	Kett	46,000			1	ARI-Dakawa	Good Condition
87	Yeild sampler		Fujiwara	72,000			1	ARI-Dakawa	Good Condition
88	Tubular Instrument Scale	100KG	SANKO	33,000			1	ARI-Dakawa	Good Condition
89	Erectric Balance	PDS200n	Yamato	13,650			1	ARI-Dakawa	Good Condition
90	Counter Scale	SD-10	Yamato	5,670			1	ARI-Dakawa	Good Condition
91	Digital Camera	DSC-W80	Sony		416,666		1	ARI-Naliendele	Good Condition
92	Grain moisture meter	Riceta m5	Kett	46,000			1	ARI-Naliendele	Good Condition
93	Yeild sampler		Fujiwara	72,000			1	ARI-Naliendele	Good Condition
94	Tubular Instrument Scale	100KG	SANKO	33,000			1	ARI-Naliendele	Good Condition

No.	Name	Model (Title)	Maker	Unit Price (JPY)	Unit Price (Tshs)	Unit Price (USD)	Qty.	Location	Remarks
95	Erectric Balance	PDS200n	Yamato	13,650			1	ARI-Naliendele	Good Condition
96	Counter Scale	SD-10	Yamato	5,670			1	ARI-Naliendele	Good Condition
97	Digital Camera	DSC-W80	Sony		416,666		1	ARI-Ukiriguru	Good Condition
98	Grain moisture meter	Riceta m5	Kett	46,000			1	ARI-Ukiriguru	Good Condition
99	Yeild sampler		Fujiwara	72,000			1	ARI-Ukiriguru	Good Condition
100	Tubular Instrument Scale	100KG	SANKO	33,000			1	ARI-Ukiriguru	Good Condition
101	Erectric Balance	PDS200n	Yamato	13,650			1	ARI-Ukiriguru	Good Condition
102	Counter Scale	SD-10	Yamato	5,670			1	ARI-Ukiriguru	Good Condition
103	Digital Camera	DSC-W80	Sony		416,666		1	ARI-Uyole	Good Condition
104	Grain moisture meter	Riceta m5	Kett	46,000			1	ARI-Uyole	Good Condition
105	Yeild sampler		Fujiwara	72,000			1	ARI-Uyole	Good Condition
106	Tubular Instrument Scale	100KG	SANKO	33,000			1	ARI-Uyole	Good Condition
107	Erectric Balance	PDS200n	Yamato	13,650			1	ARI-Uyole	Good Condition
108	Counter Scale	SD-10	Yamato	5,670			1	ARI-Uyole	Good Condition
Total				**20,375,270**	**23,136,323**	**59,690**	108		

TOTAL	USD	226,447	17,941	59,690	108	USD 304,078
	Tshs	293,676,420	23,136,323	76,973,980	108	Tshs 393,786,723
	JPY	20,375,270	1,605,198	5,370,787	108	JPY 27,351,255

Annex 4

List of Task Group Members Trained in Japan

No.	Name of TG Members	Sex	Position	Training Subject	Period
<Long Courses>					
1	Jerome J. Mghase	M	Researcher, KATRIN Ifakara	Nutrient Flow Management in Rice Production	2008 – 2011 (PhD)
2	Emmanuel Mohamed Mgonja	M	Researcher, KATRIN Ifakara	Rice Production Research in Africa	2009 – 2011 (MSc.)
3	Mganga Joshua Kitilu	M	Researcher, KATRIN Ifakara	Human Resource Development on Rice Research	2009 – 2011 (MSc.)
<Short Courses>					
1	Said K. Makalamangi	M	Tutor, MATI Igurusi	Agricultural Extension Planning Management	22 May – 04 August 2007
2	Laurent Luhembe Mathew	M	Deputy Principal, MATI Ilonga	Empowerment of Rural Women	27 August – 10 November 2007
3	Asteria S. Ringia	F	DRT HQs; Documentation Unit	IT System Techniques for Agriculture	10 January – 19 April 2008
4	Emmanuel Mohamed Mgonja	M	Researcher, KATRIN Ifakara	Rice Research Techniques	11 February – 27 November 2008
5	Mganga Joshua Kitilu	M	Researcher, KATRIN Ifakara	Rural Development in African Countries (Investigations/Researches)	26 February – 04 October 2008
6	James L. Ndosi	M	Tutor, MATI Igurusi	Empowerment of Rural women	25 May – 09 August 2008
7	Joseph J. Nzundah	M	Field Officer, ARI Naliendele	Upland Variety Selection Techniques for Sub – Sahara Africa	21 July – 01 November 2008
8	Joseph P. Kisaka	M	Field Officer, KATRIN Ifakara	Upland Variety Selection Techniques for Sub – Sahara Africa	21 July – 01 November 2008
9	Theodore T. Kessy	M	Researcher, KATRIN Ifakara	Upland Variety Selection Techniques for Sub – Sahara Africa	21 July – 01 November 2008
10	Frank O. Mkiramwinyi	M	Deputy Principal, MATI Ukiriguru	IT System Techniques for Agriculture	18 January – 23 April 2009
11	Emmanuel M. Lwesha	M	Tutor, MATI Igurusi	Development Farm Machinery for Small Scale Farmers	09 February – 17 October 2009
12	Mathew K. Jacob	M	Tutor, MATI Ilonga	Rice Cultivation Techniques Development	09 February – 14 November 2009
13	Fitta Silas Sillo	M	Tutor, KATC Moshi	Techniques for Small Scale Rice Cultivation and Extension for Africa	22 March – 07 October 2009

Note: Data is for the period from FY 2007 to the end of September 2009.

List of Tanzanian Task Group Members and Adm. ıtative Personnel

Sl.	Institution	Name	Position	Area of speciality	Assigned period in TANRICE		Expert in charge	Remarks
					From	To		
Tanzania Mainland								
1	MAFC	Mr. P. M. Lyimo	Permanent Secretary	Administration	Jun 07	2008		Transferred
2	MAFC	Mr. M. S. Muya	Permanent Secretary	Administration	2008	-		
3	MAFC	Dr. J. M. Haki	Director Research & Training	Research	Jun 07	2008	M. Tomitaka	Retired
4	MAFC	Mr. R. S. Kapande	Director Research & Training	Training	2007	-	M. Tomitaka	
5	MAFC	Dr. M. A. M. Msabaha	Acting Director Research & Development	Research	2008	2009	M. Tomitaka	Retired
6	MAFC	Mr. T. N. Kirway	Acting Director Research & Development	Research	Aug.09		M. Tomitaka	
7	MAFC	Mr. E.D.M. Mlay	Assistant Director Training	Curriculum Development	Jun 07	-	M. Tomitaka	
8	MAFC	Mr. A. W. Mrinji	Assistant Director Training	Institute Administration	July 09	-	M. Tomitaka	
9	MAFC	Mrs. S.K.L. Mutagwaba	Principal Training Officer	Institute Administration	Aug. 09	-	M. Tomitaka	
10	KATC	Mr. A. G. Pyuza	Principal	Extension	Jun 07	-	M. Tomitaka	Deputy principal up to 20 Mar. 08
11	KATC	Eng. Maregesi, G	Deputy Principal	Irrigation	Jun 07	-	M. Tomitaka	Head- Irrigation up to 20 Mar 08
12	KATC	Mr. H. Nzully	Head -Extension	Extension	Jun 07	-	T. Iemoto	
13	KATC	Mr. Chuma, E.S. M.	Tutor	Rural Development	Jun 07	-	T. Iemoto	
14	KATC	Mr. Msemo,S.H.	Tutor	Extension	Jun 07	-	T. Iemoto	
15	KATC	Ms. Mary Mtika	Assistant Tutor	Crop production	Jun 07	-	T. Iemoto	
16	KATC	Mr. Ndoro, W.B.	Assistant Tutor	Crop production	Jun 07	-	T. Iemoto	
17	KATC	Mr. E.W. Mkojera	Head- Agribusiness	Agric. Economics	Jun 07	-	N. Oizumi	
18	KATC	Mr. N. Shauritanga	Head- Information	Extension	Jun 07	Sep 08	T. Iemoto	On further studies at SUA
19	KATC	Mr. Waziri Mwinyi	Head- Crop science	Crop protection	Jun 07	-	N. Oizumi	
20	KATC	Mr. E. Zablon	Tutor	General agriculture	Jun 07	-	N. Oizumi	
21	KATC	Mr. Zani , E.A.	Tutor	General agriculture	Jun 07	-	N. Oizumi	
22	KATC	Mr. Silloh, F.	Tutor	General agriculture	Jun 07	Feb 09	N. Oizumi	On studies in Japan
23	KATC	Mr. Matinka, M.P.	Tutor	Extension	Jun 07	-	N. Oizumi	
24	KATC	Ms. Chapille, R.B.	Tutor	General agriculture	Jun 07	-	N. Oizumi	
25	KATC	Mr.Tibanyendela, N	Tutor	Horticulture	Mar 09	-	N. Oizumi	

Annex 6

Sl.	Institution	Name	Position	Area of speciality	gned period in TANRICE		Expert in charge	Remarks
					From	To		
26	KATC	Ms. Zarubia Kinyogo	Tutor	Home economics and nutrition	Jun 09	-	N. Oizumi	
27	KATC	Mr. A. Shayo	Tutor	Horticulture	Jun 09	-	N. Oizumi	
28	KATC	Mr. G. Marawitti	Head- Irrigation	Irrigation	Jun 07	-	T. Iemoto	
29	KATC	Mr. P. Mawere	Assistant tutor	Land use	Jun 07	-	T. Iemoto	
30	KATC	Mr. D.O. Nkollo	Head- Agro-mechanization	Mechanization	Jun 07	-	N. Oizumi	
31	KATC	Mr. Soi, S. D.	Assistant tutor	Mechanization	Jun 07	-	N. Oizumi	
32	KATC	Mr. P. Mihayo	Assistant tutor	Mechanization	Jun 07	-	N. Oizumi	
33	KATC	Mr. E. D. Mziray	Assistant tutor	Mechanization	Jun 07	-	N. Oizumi	
34	KATC	Mr. Mwakipesile, B. G	Head- Animal Science	Animal science	Jun 07	-	T. Iemoto	
35	KATC	Mr. G. Kalisa	Tutor	Animal science	Jun 07	-	T. Iemoto	On further studies in UK
35	KATC	Mr. R. J. Shayo	Principal	Extension	Jun 07	Mar 08	M. Tomitaka	Retired on 20.Mar.08
37	KATC	Mr. E. S. Massawe	Head- Production	Extension	Jun 07	Aug 09	T. Iemoto	On retirement leave
38	KATC	Mr. A. E. Kissinga	Head- Animal science	Rural development	Jun 07	Jan 09	T. Iemoto	On secondment
39	KATC	Mr. Z. Sarakikya	Head- Administration	Crop Production	Jun 07	Nov 08	N. Oizumi	Retired in Nov 2008
40	MATI-Igurusi	Eng. Iddi A. Kinyaga	Principal	Mechanization Management	Jun 07	-	M. Tomitaka	
41	MATI-Igurusi	Eng. George Shundi	Deputy Principal	Agricultural Engineering	Jun 07	-	M. Tomitaka	
42	MATI-Igurusi	Mr. Saidi Makalamangi	Coordinator of Studies	Irrigation Agronomy	Jun 07	-	T. Iemoto	
43	MATI-Igurusi	Eng. Rashid Pembe	Workshop Manager	Mechanical Engineering	Jun 07	-	N. Oizumi	
44	MATI-Igurusi	Mr. Nelson Ndangala	Head-Land Use Dept	LUP & Environmental studies	Jun 07	-	T. Iemoto	
45	MATI-Igurusi	Mr. Rashidi Chikoyo	Catering Officer	Agric Extension & Education	Jun 07	-	T. Iemoto	
46	MATI-Igurusi	Mr. Emmanuel Lwesha	Assist Coordinator of Studies	Agricultural Engineering	Jun 07	-	N. Oizumi	
47	MATI-Igurusi	Mr. Erick Kibona	Acting Catering Officer	Agronomy	Jun 07	-	N. Oizumi	
48	MATI-Igurusi	Mr. Beno Kiwale	Farm Manager	Agriculture	Jun 07	-	N. Oizumi	
49	MATI-Igurusi	Mr. Fredrick Batakanwa	Assist Coordinator of Studies	Agricultural Engineering	Jun 07	-	N. Oizumi	
50	MATI-Igurusi	Mr. Patson Mwalonde	Agricultural Tutor	Agribusiness	Jun 07	-	N. Oizumi	
51	MATI-Igurusi	Mr. Elly Mbinile	Agricultural Tutor	Food Science Technology	Jun 07	-	N. Oizumi	
52	MATI-Igurusi	Mr. Dickson Chihamba	Principal Agric Field Officer	Water Resources Management	Jun 07	-	T. Iemoto	

Annex 6

Sl.	Institution	Name	Position	Area of speciality	gned period in TANRICE		Expert in charge	Remarks
					From	To		
53	MATI-Igurusi	Mr. Wilbroard Mosha	Principal Agric Field Officer	Crop Production	Jun 07	-	N. Oizumi	
54	MATI-Igurusi	Mr. Alex Luhanga	Principal Agric Field Officer	Crop Production	Jun 07	-	N. Oizumi	
55	MATI-Igurusi	Mr. James Ndossi	Principal Agric Field Officer	Agric Extension and Gender	Jun 07	-	T. Iemoto	
56	MATI-Ilonga	Mrs. Anne N. Assenga	Principal	Agriculture (Agronomy)	Jun 07	-	M. Tomitaka	
57	MATI-Ilonga	Mr. Laurent Mathew	Deputy Principal	Soil Science & Agronomy	Jun 07	-	M. Tomitaka	
58	MATI-Ilonga	Mr. Zahabu P. Mbiu	Tutor	Irrigation	Jun 07	-	T. Iemoto	
59	MATI-Ilonga	Mr. Mathew J. Kaozya	Tutor	Agriculture	Jun 07	-	N. Oizumi	
60	MATI-Ilonga	Ms. Cecilia Mushui	Tutor	Animal science	Apr 08	-	N. Oizumi	
61	MATI-Ilonga	Mr. A. S. Mshana	Tutor	Farm Management	Jun 07	-	N. Oizumi	
62	MATI-Ilonga	Mr. Ioseph I. Magwe	Tutor	Agro-mechanization	Jun 07	-	N. Oizumi	
63	MATI-Ilonga	Mr. Arinel Shanga	Tutor	Home economics	Jun 07	-	N. Oizumi	
64	MATI-Ilonga	Mr. T. Shanga	Tutor	Horticulture	Jun 07	-	N. Oizumi	
65	MATI-Ilonga	Mr. Z. Mabago	Tutor	Agriculture	Apr 08	-	N. Oizumi	
66	MATI-Ilonga	Mr. John Ngailo	Tutor	Extension	Feb 08	-	T. Iemoto	
67	MATI-Ukiriguru	Mrs. P. Makwaia	Principal	Food Sc& Nutrition/Gender Administration	Jun 07	-	M. Tomitaka	
68	MATI-Ukiriguru	Mr. F.O. Mkiramwinyi	Deputy Principal & Coordinator of studies	Management of Natural Resources for sustainable Agriculture/Administration	Jun 07	-	M. Tomitaka	
69	MATI-Ukiriguru	Mr. T.L. Bayona	Agricultural Tutor	Irrigation/Water Mgt/ Tanrice coordinator	Jun 07	-	T. Iemoto	
70	MATI-Ukiriguru	Mr. D.P. Olotu	Agricultural Tutor/Farm Manager	Agromechanization	Jun 07	-	N. Oizumi	
71	MATI-Ukiriguru	Ms. Mary H.Sayi	Agricultural Tutor/Gender	Food Sc.& Nutrition/gender	Jun 07	-	N. Oizumi	
72	MATI-Ukiriguru	Mr. P.P. Lyapa	Agricultural Tutor	General Agriculture	Jun 07	-	N. Oizumi	
73	MATI-Ukiriguru	Mr. E.A. Msemo	Agricultural Tutor	Plant Protection	Jun 07	-	N. Oizumi	
74	MATI-Ukiriguru	Mr. K.F.Mbemba	Agricultural Tutor	General Agriculture	Jun 07	-	N. Oizumi	
75	MATI-Ukiriguru	Mr. C.W. Ryoba	Agricultural Tutor	General Agriculture	Jun 07	-	N. Oizumi	
76	MATI-Ukiriguru	Mr. C.J. Mhando	Agricultural Tutor	Agromechanization	Jun 07	-	N. Oizumi	
77	MATI-Ukiriguru	Mr. P.S. Mahalu	Agricultural Tutor	Agromechanization	Jun 07	-	N. Oizumi	
78	MATI-Ukiriguru	Mr. S.L. Mwijage	Agricultural Tutor	Agriculture Education and extension	Jun 07	-	T. Iemoto	
79	KATRIN	NJ. M Kibanda	Principal Agricultural Research Officer I	Rice Breeding	Jun 07	-	N. Sekiya	

Sl.	Institution	Name	Position	Area of speciality	gned period in TANRICE		Expert in charge	Remarks
					From	To		
80	KATRIN	Theodore T. Kessy	Agricultural Research Officer II	Rice Breeding	Jun 07	-	N. Sekiya	
81	KATRIN	Jerome Mghase	Agricultural Research Officer II	Agronomy	Jun 07	-	N. Sekiya	On study leave in Japan
82	KATRIN	Emanuel Mgonja	Agricultural Research Officer II	Crop Protection	Jun 07	-	N. Sekiya	On study leave in Japan
83	KATRIN	Mganga Kitilu	Agricultural Research Officer II	Agronomy	Jun 07	-	N. Sekiya	To be on study leave in Japan
84	KATRIN	M. S. Mkuya	Principal Agricultural Field Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
85	KATRIN	G. S. Mwembe	Principal Agricultural Field Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
86	KATRIN	Kisaka J. P.	Principal Agricultural Field Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
87	ARI-Uyole	Deogratias Kisandu	Principal Agricultural Research Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
88	ARI-Uyole	Raymond M. Mghogho	Principal Agricultural Research Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
89	ARI-Ukiriguru	Rashid K. Lussewa	Principal Agricultural Research Officer I	Rice Breeding	Jun 07	-	N. Sekiya	
90	ARI-Dakawa	Mvukiye N. E.	Principal Agricultural Research Officer I	Agronomy	Jun 07	-	N. Sekiya	
91	ARI Naliendele	Elly Kafiriti	Principal Agricultural Research Officer I	Agronomy	Jun 07	-	N. Sekiya	
92	ARI Naliendele	Joseph Nzunda	Agricultural Research Officer	Agronomy	Jun 07	-	N. Sekiya	
Zanzibar								
1	KATI	Mr. Mohammed Khamis Rashid	Director	Rural Development	Sep 08	-	M. Tomitaka	
2	KATI	Mr. Juma Omar Abdalla	Tutor: Crop science	Agronomy	Sep 08	-	N. Oizumi	
3	KATI	Mr. Foum Ali Garu	Tutor: Crop science	Agronomy	Sep 08	-	N. Oizumi	
4	KATI	Mr. Ramadhan Salum Othman	Coordinator of Studies	Agricultural Extension	Sep 08	-	T. Iemoto	
5	KATI	Mr. Salum Abdalla Salum	Head of Crop Deprt	Agronomy	Sep 08	-	N. Oizumi	
6	KATI	Mr. Kombo Ali Rashid	Head of Agromech Dept	Agro-mechanization	Sep 08	-	N. Oizumi	
7	KATI	Ms. Mashavu Sukwa Said	Tutor: Horticulture	Horticulture	Sep 08	-	N. Oizumi	
8	KATI	Mr. Kombo Ali Rashid	Tutor: Crop	Horticulture	Sep 08	-	N. Oizumi	
9	KARS	Khatib J. Khatib	Principal Agricultural Research Officer I	Agronomy	Jun 08	-	N. Sekiya	
10	KARS	Subira M. Makame	Agricultural Field Officer	Agronomy	Jun 08	-	N. Sekiya	
11	Matangatuani Research Station	Hamao O. Taib	Assistant Researcher	Rice Breeding	Jun 08	-	N. Sekiya	

Breakdown of Cost Sharing for Standard Training

Annex 7

MATIs	Name of irrigation scheme	District	Region	Training course	Cost sharing of standard training (T.Shs)			
					District	MAFC	JICA	Total
KATC	Mahande	Monduli	Arusha	Baseline survey			1,531,900	1,531,900
KATC	Mahande	Monduli	Arusha	Residential training			10,107,200	10,107,200
KATC	Mahande	Monduli	Arusha	1st infield training			2,913,000	2,913,000
KATC	Mahande	Monduli	Arusha	2nd infield training			2,440,200	2,440,200
KATC	Mahande	Monduli	Arusha	3rd infield training			1,785,000	1,785,000
KATC	Mussa Mwijanga	Hai	Kilimanjaro	Baseline survey			444,000	444,000
KATC	Kitivo	Lushoto	Tanga	Baseline survey			1,375,000	1,375,000
KATC	Kitivo	Lushoto	Tanga	Residential training	8,973,000		1,040,000	10,013,000
KATC	Kitivo	Lushoto	Tanga	1st infield training	2,430,800			2,430,800
KATC	Kitivo	Lushoto	Tanga	2nd infield training	2,430,800			2,430,800
KATC	Kitivo	Lushoto	Tanga	3rd infield training	3,345,000			3,345,000
KATC	Kitivo	Lushoto	Tanga	4rd infield training			1,787,200	1,787,200
MATI-Igurusi	Ruanda Majenje	Mbarali	Mbeya	Baseline survey			980,000	980,000
MATI-Igurusi	Ruanda Majenje	Mbarali	Mbeya	Residential training	846,000		4,619,650	5,465,650
MATI-Igurusi	Ruanda Majenje	Mbarali	Mbeya	1st & 2nd infield training	420,000		672,000	1,092,000
MATI-Igurusi	Ruanda Majenje	Mbarali	Mbeya	3rd infield training			1,008,900	1,008,900
MATI-Igurusi	Ruanda Majenje	Mbarali	Mbeya	4rd infield training	140,000		297,000	437,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	Baseline survey			1,306,000	1,306,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	Residential training	6,260,000			6,260,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	1st infield training	2,327,000			2,327,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	2nd infield training	1,528,000			1,528,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	3rd infield training	727,000			727,000
MATI-Igurusi	Sakalilo	Sumbawanga	Rukwa	4rd infield training	140,000		1,616,600	1,756,600
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	Baseline survey			2,005,400	2,005,400
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	Residential training	6,000,000		3,511,500	9,511,500
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	1st infield training			n.a.	0
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	2nd infield training			3,347,600	3,347,600
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	3rd infield training			2,713,150	2,713,150
MATI-Ilonga	Kiroka	Morogoro Rural	Morogoro	4rd infield training			2,022,400	2,022,400
MATI-Ilonga	Ilonga	Kilosa	Morogoro	Baseline survey			363,000	363,000
MATI-Ilonga	Ilonga	Kilosa	Morogoro	Residential training	9,410,280			9,410,280
MATI-Ilonga	Ilonga	Kilosa	Morogoro	1st infield training	1,615,350			1,615,350
MATI-Ilonga	Ilonga	Kilosa	Morogoro	2nd infield training	1,615,350			1,615,350
MATI-Ilonga	Ilonga	Kilosa	Morogoro	3rd infield training	1,615,350			1,615,350
MATI-Ilonga	Ilonga	Kilosa	Morogoro	4rd infield training			651,100	651,100
MATI-Ukiriguru	Titye	Kasulu	Kigoma	Baseline survey			2,994,700	2,994,700
MATI-Ukiriguru	Titye	Kasulu	Kigoma	Residential training	11,451,000			11,451,000
MATI-Ukiriguru	Titye	Kasulu	Kigoma	1st infield training	3,886,190			3,886,190
MATI-Ukiriguru	Titye	Kasulu	Kigoma	2nd infield training	4,220,690			4,220,690
MATI-Ukiriguru	Titye	Kasulu	Kigoma	3rd infield training	5,120,690			5,120,690
MATI-Ukiriguru	Titye	Kasulu	Kigoma	4rd infield training			2,008,500	2,008,500
MATI-Ukiriguru	Mahiga	Kwimba	Mwanza	Baseline survey			540,900	540,900
MATI-Ukiriguru	Mahiga	Kwimba	Mwanza	Residential training	11,451,000			11,451,000
MATI-Ukiriguru	Mahiga	Kwimba	Mwanza	1st infield training	1,372,100			1,372,100
Total					**87,325,600**	0	**54,081,900**	**141,407,500**
Cost Sharing Ratio					**61.8%**	0.0%	**38.2%**	**100.0%**

List of Training Conducted

<Standard Training>

MATI	Scheme	Dirstict	Period of Training	Key Farmers *			Intermediate Farmers **			Other farmers in Field day			Sub-total of Farmers			Government & Scheme staff *			Grand total		
				M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
KATC	Mahande	Monduli	Oct. 07 - Jun. 08	8	8	16	23	16	39	19	21	40	50	45	95	3	1	4	53	46	99
KATC	Kitivo	Lushoto	Nov. 08 - Jul. 09	9	7	16	22	11	33	26	17	43	57	35	92	4	0	4	61	35	96
MATI-Igurusi	Ruanda Majenje	Mbarali	Oct. 08 - Jul. 09	8	8	16	7	5	12	39	8	47	54	21	75	3	0	3	57	21	78
MATI-Igurusi	Sakalilo	Sumbawanga	Oct. 08 - Aug. 09	8	8	16	20	9	29	28	12	40	56	29	85	4	0	4	60	29	89
MATI-Ilonga	Kiroka	Morogoro Rural	Sep. 08 - Aug. 09	8	8	16	19	29	48	44	23	67	71	60	131	2	2	4	73	62	135
MATI-Ilonga	Ilonga	Kilosa	Oct. 08 - Aug. 09	10	10	20	12	17	29	81	86	167	103	113	216	6	0	6	109	113	222
MATI-Ukiriguru	Titye	Kasulu	Oct. 08 - Aug. 09	9	8	17	14	35	49	240	640	880	263	683	946	3	1	4	266	684	950
Total				**60**	**57**	**117**	**117**	**122**	**239**	**477**	**807**	**1284**	**654**	**986**	**1640**	**25**	**4**	**29**	**679**	**990**	**1669**
Ratio (%)				**51%**	**49%**		**49%**	**51%**		**37%**	**63%**		**40%**	**60%**		**86%**	**14%**		**41%**	**59%**	

Note: * The number of Key Farmers and Government/scheme staff are of those who participated in the residential training.
** The number of Intermediate Farmers are the average number of participants in all of the infield training sessions, as the daily attendance was varied.

<Subject-matter Training>

MATI	Scheme	Dirstict	Period of Training	Training Course	Farmers *			Scheme/Village staff *			Total		
					M	F	Total	M	F	Total	M	F	Total
KATC	Ndungu	Same	27-28 Mar. 08	Gender	14	19	34	5	1	6	19	20	40
KATC	Lower Moshi	Moshi	16-21 Feb. 09	Irrigation scheme management (Residential)	14	4	18	3	1	4	17	5	22
KATC	Ndungu	Moshi	2-5 Mar. 09	Irrigation scheme management	30	24	54	4	1	5	34	25	59
Total					**58**	**47**	**106**	**12**	**3**	**15**	**70**	**50**	**121**
Ratio (%)					**55%**	**44%**		**80%**	**20%**		**58%**	**41%**	

Note: * The number of participants are the average number of participants on all of the days of training, as the daily attendance was varied.

Proposed Revision of the Logical Framewo

Title: Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture Prepared: 12 October, 2009 Version 4.0

Target Area: Forty (40) priority irrigation schemes in Tanzania Target Groups: Smallholder rice farmers (15,000 farmers) Responsible Agency: TD and ARDD, MAFC

Implementing Agencies: KATC and other MATIs (Igurusi, Ilonga, and Ukiriguru), ARIs (Rice Research Programme) Collaborating Agencies: ZITSUs and Districts

Duration: 2007 to 2012 (5 years)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal The TC contributes to ASDP objectives of improving and expanding irrigated agriculture.	The total area of irrigation schemes where the training developed by the TC is conducted exceeds 15,000 ha by 2018.	Reports of KATC / MATIs DADP reports	
Overall Goals 1. The training developed by the TC is implemented in other irrigation schemes. 2. The income from rice production among smallholder rice farmers in priority irrigation schemes is increased.	1. The training are conducted in at least 12 other irrigation schemes by 2015. 2. The income from rice production among smallholder rice farmers is increased by 30% in each scheme by 2015.	Reports of KATC / MATIs DADP reports Field survey	* There is no drastic climate problem. * Smallholder rice farmers in other irrigation schemes adopt the technologies introduced through the training.
Purpose Productivity of rice cultivation in priority irrigation schemes is increased through strengthening service delivery systems of irrigated agriculture.	1. Rice yield per unit area is increased at least by 1 ton/ha in each priority irrigation scheme. 2. Annual monitoring and planning on rice farming is continuously conducted by the relevant district officers and farmers in priority irrigation schemes.	Reports of KATC / MATIs and ARIs Monitoring reports of the TC Record of districts Field survey	* Rice price is not drastically dropped. * Farm inputs (e.g. fertilizers) are available and affordable for smallholders. * MAFC takes further initiatives to disseminate the farmer-to-farmer training and extension approach to other irrigation schemes.
Outputs 1. Rice cultivation practices are improved in priority irrigation schemes through the farmer-to-farmer extension approach.	1-1. Participation rate of women farmers exceeds 45% in both residential and infield training. 1-2. The standard training are implemented under DADPs in 40 priority irrigation schemes. 1-3. At least 50 farmers per irrigation scheme participate in each field day held in priority irrigation schemes. 1-4. At least 10 basic rice cultivation technologies introduced through the training are adopted by more than 50% of Key Farmers on average in priority irrigation schemes. 1-5. At least 5 rice cultivation technologies introduced through the training are adopted by more than 50% of Intermediate Farmers on average in priority irrigation schemes.	Annual reports of KATC / MATIs and ARIs Monitoring reports of the TC Field survey	*Any serious natural disasters do not occur. * Relevant officers of the collaborating agencies continuously supervise and provide technical supports to the smallholder rice farmers in priority irrigation schemes.

2. Technical capacities of the research, training and extension institutions are enhanced to further promote rice production in the future.	2-1. Ne ːe varieties (lines) are submitted to the variety release committee. 2-2. At least one set of guidelines each on multi-location rice variety trial, upland rice production and irrigated rice production is prepared by research, training and/or extension institutions.	)	

Activities	Inputs		Budget for capacity building at district levels does not substantially decrease.
	Japanese Side	**Tanzanian Side**	
1-1. To identify priority irrigation schemes through dialogues with the stakeholders. 1-2.To provide districts with technical support for planning training on irrigated rice production as part of DADPs. 1-3. To conduct trainers training. 1-4. To conduct the standard training with gender consideration. 1-5. To conduct subject matter trainings with gender consideration. 1-6. To monitor and evaluate the standard training and subject matter trainings. 2-1. To conduct trainings and workshops for the stakeholders of research, training and extension institutions. 2-2. To conduct on-station trials for rice varieties including NERICA. 2-3. To conduct on-farm trials for rice varieties including NERICA. 2-4. To provide districts with technical support for promotion of rice extension. 2-5. To prepare basic guidelines on rice cultivation technologies.	1. Dispatch of experts (Long-term and Short-term) The experts with the following assignment titles and expertise will be assigned upon necessity: Chief Adviser, Coordinator, Rice Cultivation, Farm Management, Irrigation, Farmers Training, Upland Rice Cultivation and Research, Gender, Livelihood Improvement, Information Management, Post-harvest Processing, Marketing, and Irrigation Scheme Management. 2. Allocation of operational costs of the TC. 3. Provision of machinery and equipment. 4. Training of Task Group members in Japan and/or in third countries. 5. Improving field training facilities at MATI-Ilonga and MATI-Ukiriguru	1. Assignment of Task Group members and administrative personnel. 2. Allocation of implementation costs for the TC such as salaries of task members and necessary expenses for training (DADP funds). 3. Provision of working spaces and necessary facilities for Japanese experts to perform their duties. 4. Farmers' labour contribution to on-farm activities in the irrigation schemes.	**Pre-conditions** MAFC recognizes the necessity of enhancing capacities of research, training and extension institutions. Security conditions in the target areas are maintained.

Major Points of the Proposed Revision of the Logical Framework

Part of the L/F	Description in L/F Version 3.0	Proposed Revision	Explanation
Super Goal	N.A.	The TC contributes to ASDP objectives of improving and expanding irrigated agriculture.	This super goal is stated as one of the overall goals in the current L/F. However, the contribution to achievement of ASDP objectives may not automatically be attained by the increased productivity, i.e. the purpose of the TC, as a direct attribute. There is a necessity to set the overall goal that is more directly related to the purpose of the TC.
OVI for the Super Goal	N.A.	The total area of irrigation schemes where the training developed by the TC is conducted exceeds 15,000 ha by 2018.	As the average area per scheme is about 230 ha based on the data initially collected from 68 potential irrigation schemes. Assuming that three irrigation schemes would be covered a year by each training institute after the completion of the TC, a total of 64 schemes are expected to be covered by 2018. The target figure is a roundup of the sum of multiplication.
Means of Verification of indicators for Super Goal	N.A.	Reports of KATC / MATIs DADP reports	The information on the schemes where the training is conducted would be obtained from these documents.
Important Assumption from Overall Goals to Super Goal	N.A.	1. There is no drastic climate problem. 2. Smallholder rice farmers in other irrigation schemes adopt the technologies introduced through the training.	These conditions should be monitored as; 1. the climate problem such as drought may hamper the implementation of planned training. 2. adoption of technology by farmers should be monitored to ensure the effects of training.
Overall Goals	1. The TC contributes to ASDP objectives of improving and expanding irrigated agriculture. 2. Profitability and incomes of smallholder rice farmers are increased.	1. The training developed by the TC is implemented in other irrigation schemes. 2. The income from rice production among smallholder rice farmers in priority irrigation schemes is increased.	1. As the effects of increased productivity to the income of farmers would be limited in the target area, there would be necessity to expand the areas to be covered under the training to have further enhancement of rice cultivation. 2. The income to be increased as the result of the attainment of the purpose of the TC, i.e. increased productivity of rice, should be limited to those from rice in the target area.
OVI for the Overall Goals	1. Increase of incomes among smallholder rice farmers 2. Improvement of household budget among smallholder rice farmers	1. The training are conducted in at least 12 other irrigation schemes by 2015. 2. The income from rice production among smallholder rice farmers is increased by 30% in each scheme by 2015.	1. As each training institute is to conduct 2 to 3 training per year during the TC, it is anticipated that each of them would continue training at lease once a year after the TC. 2. The original indicator would require comprehensive study on household economy, which is not in the scope of the TC. Target figure of new indicator is obtained from a rough estimation of the average rate of contribution by Tsh.500,000 (gross increase from 1 ton of additional yield of paddy, i.e. the target for the purpose of the TC) in cases of different baseline yields.
Means of Verification of indicators for Overall Goals	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Farming survey report	Reports of KATC / MATIs DADP reports Field survey	As the overall goals are to be attained after the completion of the TC, monitoring report of the TC should not be available. Also, the farming survey reports may not be available for the other irrigation schemes, thus the indicators would be obtained from field surveys.

Important Assumption from the Purpose to Overall Goals	1. Rice price is not drastically dropped. 2. Farm inputs (e.g. fertilizers) are available and affordable for smallholders.	1. Rice price is not drastically dropped. 2. Farm inputs (e.g. fertilizers) are available and affordable for smallholders. 3. MAFC takes further initiatives to disseminate the farmer-to-farmer training and extension approach to other irrigation schemes.	One more assumption is added in line with the newly added overall goal, i.e. further expansion of training to other irrigation schemes.
OVI for the Purpose	1. Increased rice yield per unit area in the irrigation schemes. 2. Increased areas of fields for rice cropping in the irrigation schemes	1. Rice yield per unit area is increased at least by 1 ton/ha in each priority irrigation scheme. 2. Annual monitoring and planning on rice farming is continuously conducted by the relevant district officers and farmers in priority irrigation schemes.	1. Target increase of yield is set based on the practical interpretation of the achievement so far reported by the farmers. 2. As the TC does not have control over the physical structures and facilities of irrigation that is to contribute the increase of rice cropping area, the original indicator is replaced by the new indicator, which is to measure the achievement from the viewpoint of extension service delivery
Means of Verification of indicators for the Purpose	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Farming Survey Report	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Records of districts Field survey	The farming survey reports may not be available for all of priority irrigation schemes, thus the indicators would be obtained from field surveys.
Important Assumption from Output to the Purpose	Any serious natural disasters do not occur.	1. Any serious natural disasters do not occur. 2. Relevant officers of the collaborating agencies continuously supervise and provide technical supports to the smallholder rice farmers in priority irrigation schemes.	One more assumption is added, as the increased productivity may not be attained if the farmers would not continue applying the improved cultivation techniques. Thus the services of relevant government officers become a part of the assumptions.
OVI for Output 1	1. Number of meetings and field days held among irrigation scheme staff, key farmers, intermediate farmers, etc. 2. Number of rice cultivation technology adopted by the farmers (men/women) in the irrigation schemes. 3. Number of training materials produced for gender training and participation rate of woman farmers.	1. Participation rate of women farmers exceeds 45% in both residential and infield training 2. The standard training are implemented under DADPs in 40 priority irrigation schemes. 3. At least 50 farmers per irrigation scheme participate in each field day held in priority irrigation schemes. 4. At least 10 basic rice cultivation technologies introduced through the training are adopted by more than 50% of Key Farmers on average in priority irrigation schemes. 5. At least 5 rice cultivation technologies introduced through the training are adopted by more than 50% of Intermediate Farmers on average in priority irrigation schemes.	New indicators are set to measure the following; 1. Participation rate of women farmers is to be nearly half of the participants. As the participants may inevitably be skewed depending on the theme in the subject matter training, this indicator is to be applied to the standard training. 2. Target coverage of the training undertakings with DADP funding is set for all of 40 priority irrigation schemes. 3. The target figure is set based on the achievement so far made, excluding the case with exceptional reasons. 4. The target figure is set based on the achievement so far made with some adjustable margins, as the base figure was obtained only from one irrigation scheme. 5. The target figure is set based on the achievement so far made with some adjustable margins, as the base figure was obtained only from one irrigation scheme.
Output 2	Cooperative linkages between Research, Training and Extension Institutions are strengthened for improving rice productivity.	Technical capacities of the research, training and extension institutions are enhanced to further promote rice production in the future.	The activities for this output are more to strengthen the capacities of relevant institution as technical agencies, rather than to strengthen the cooperative linkage. Thus the expression is modified to further clarify the logical

			sequence between the activities and the expected output.
OVI for Output 2	1. Number of the training implementation under DADPs. 2. Number of meetings and technical seminars conducted among the stakeholders. 3. Number of rice varieties (lines) submitted to the variety release committee.	1. New rice varieties (lines) are submitted to the variety release committee. 2. At least one set of guidelines each on multi-location rice variety trial, upland rice production and irrigated rice production is prepared by research, training and/or extension institutions.	Indicator 1 in the current L/F is to be moved as indicator for output 1. Indicator 2 is removed, since it is one of the outcomes and its achievement depends directly on the inputs, which is not the output of the activities. To measure the technical capacity, another indicator is newly added, i.e. the preparation of technical guidelines.
Means of Verification of indicators for Outputs	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Ex-participants' report Farming survey report	Annual reports of KATC/MATIs and ARIs Monitoring reports of the TC Field survey	Ex-participants' reports should be included as a part of the monitoring reports of the TC. The farming survey reports may not be available for all of priority irrigation schemes, thus the indicators would be obtained from field surveys
Activity 2.1	To conduct workshops for the stakeholders.	To conduct trainings and workshops for the stakeholders of research, training and extension institutions.	Clarification of the stakeholders to take part in this activity is added.
Pre-conditions	MAFC recognizes the necessity of cooperation between research, training and extension institutions.	MAFC recognizes the necessity of enhancing capacities of research, training and extension institutions.	Along with the modification of Output 2, expression of this important assumption is also modified.

Logical Framework

Title: Technical Cooperation in Supporting Service Delivery Systems of Irrigated Agriculture Prepared: 12 October, 2009 Version 4.1

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Purpose Productivity of rice cultivation in priority irrigation schemes is increased through strengthening service delivery systems of irrigated agriculture.	1. Rice yield per unit area is increased at least by 1 ton/ha in each priority irrigation scheme. 2. Annual monitoring and planning on rice farming is continuously conducted by the relevant district officers and farmers in priority irrigation schemes.	Reports of KATC / MATIs and ARIs Monitoring reports of the TC Record of districts Field survey	* Rice price is not drastically dropped. * Farm inputs (e.g. fertilizers) are available and affordable for smallholders. * MAFC takes further initiatives to disseminate the farmer-to-farmer training and extension approach to other irrigation schemes.
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APPENDIX 2

2. Technical capacities of the research, training and extension institutions are enhanced to further promote rice production in the future.	2-1. Ne ce varieties (lines) are submitted to the variety release committee. 2-2. At least one set of guidelines each on multi-location rice variety trial, upland rice production and irrigated rice production is prepared by research, training and/or extension institutions.		
Activities 1-1. To identify priority irrigation schemes through dialogues with the stakeholders. 1-2.To provide districts with technical support for planning training on irrigated rice production as part of DADPs. 1-3. To conduct trainers training. 1-4. To conduct the standard training with gender consideration. 1-5. To conduct subject matter trainings with gender consideration. 1-6. To monitor and evaluate the standard training and subject matter trainings. 2-1. To conduct trainings and workshops for the stakeholders of research, training and extension institutions. 2-2. To conduct on-station trials for rice varieties including NERICA. 2-3. To conduct on-farm trials for rice varieties including NERICA. 2-4. To provide districts with technical support for promotion of rice extension. 2-5. To prepare basic guidelines on rice cultivation technologies.	**Inputs** **Japanese Side** 1. Dispatch of experts (Long-term and Short-term) The experts with the following assignment titles and expertise will be assigned upon necessity: Chief Adviser, Coordinator, Rice Cultivation, Farm Management, Irrigation, Farmers Training, Upland Rice Cultivation and Research, Gender, Livelihood Improvement, Information Management, Post-harvest Processing, Marketing, and Irrigation Scheme Management. 2. Allocation of operational costs of the TC. 3. Provision of machinery and equipment. 4. Training of Task Group members in Japan and/or in third countries. 5. Improving field training facilities at MATI-Ilonga and MATI-Ukiriguru **Tanzanian Side** 1. Assignment of Task Group members and administrative personnel. 2. Allocation of implementation costs for the TC such as salaries of task members and necessary expenses for training (DADP funds). 3. Provision of working spaces and necessary facilities for Japanese experts to perform their duties. 4. Farmers' labour contribution to on-farm activities in the irrigation schemes.	Budget for capacity building at district levels does not substantially decrease. **Pre-conditions** MAFC recognizes the necessity of enhancing capacities of research, training and extension institutions. Security conditions in the target areas are maintained.

APPENDIX 2