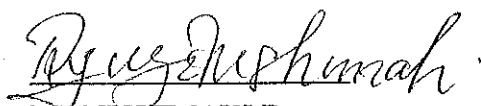


THE MID-TERM EVALUATION REPORT FOR
THE KILIMANJARO AGRICULTURAL TRAINING CENTRE
PHASE II PROJECT
IN THE UNITED REPUBLIC OF TANZANIA

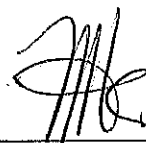
DAR ES SALAAM, MAY 25, 2004



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Table of Contents

1. Objective and Method of the Evaluation
 - 1-1 Objective of the Evaluation
 - 1-2 Method of the Evaluation
 - 1-3 Members of the Evaluation Team

2. Outline of the Project
 - 2-1 Background and Proceeding of the Project
 - 2-2 Objective of the Project

3. Revision of PDM and PO

4. Results of the Evaluation with Five Criteria
 - 4-1 Relevance
 - 4-2 Effectiveness
 - 4-3 Efficiency
 - 4-4 Impact
 - 4-5 Sustainability

5. Conclusion
 - 5-1 In Tanzania
 - 5-2 In Regional Countries

6. Recommendations

Annexes

1. Revised Project Design Matrix
2. Present Project Design Matrix
3. Plan of Operations
4. Progress of Project Activities
5. Assignment of Tanzanian Counterpart Personnel and Acceptance of Tanzanian Counterparts Personnel for Training in Japan
6. Assignment of Japanese Experts
7. Allocated Budget by the Government of Tanzania
8. Allocated Budget by the Government of Japan for Local Cost Expenditure
9. List of Equipment Provided by the Government of Japan



1. Objective and Method of the Evaluation

1-1 Objective of the Evaluation

The evaluation activities were performed with the objectives:

- 1) Evaluating the degree of achievement based on the Record of Discussions, the Project Design Matrix (hereinafter referred to as "PDM") and the Plan of Operations (hereinafter referred to as "PO") during the first half of the Project,
- 2) Reviewing and revising the PDM and the PO for the remaining cooperation term, if necessary, and
- 3) Identifying problems on any aspects of the Project implementation and proposing necessary solutions.

1-2 Method of the Evaluation

(1) In Tanzania

To carry out Mid-term Evaluation, the Joint Evaluation Team (hereinafter referred to as "the Team") consisting of both the Tanzanian side and the Japanese side has conducted the hearing of the presentation made by the counterpart personnel of the Project, field visit and a series of discussions within the Team and other partners. The evaluation was made based on the findings from the above activities, and the following five evaluation criteria.

- a) Relevance: Relevance is referred to the validity of the Project Purpose and the Overall Goal in compliance with the development policy of the Government of Tanzania as well as the needs of beneficiaries.
- b) Effectiveness: Effectiveness is referred if the expected benefits of the Project have been achieved as planned and if the benefit was brought about as a result of the Project (not of the external factors).
- c) Efficiency: Efficiency is referred to the productivity of the implementation process and examined if the input of the Project was efficiently converted into the output.
- d) Impact: Impact is referred to direct and indirect, positive and negative impacts caused by implementing the Project including the extent of the prospect of the achievement of the Overall Goal.
- e) Sustainability: Sustainability is referred to the extent that the Project can be further developed by the recipient country and the benefits generated by the Project can be sustained under the recipient country's policies, technology, systems, and financial state.

(2) In Regional Countries

The Regional Technical Cooperation Promotion Programme (hereinafter referred to as



“RTCPP”) is to be implemented to effectively utilize the existing resource in Tanzania and to examine the possibility of further expanding the effects of the Project activities. Therefore, it is not necessary to conduct the Mid-term Evaluation for RTCPP with detailed criteria and measurement as is to be applied to the Project in Tanzania. The Team reviewed the achievement so far made and confirmed the future plan and prospects based on the interviews with the relevant personnel in Tanzania and documents compiled by the Project.

1-3 Members of the Evaluation Team

(1) The Japanese Team

Name	Job title	Occupation
Mr. NISHIMAKI Ryuzo	Team Leader	Senior Researcher (Rural Development), Rural Development Department, JICA
Mr. KITAGAWA Kazuhiko	Irrigated Rice Production	Chief of Overseas Land Improvement Cooperation Office, Design Division, Rural Development Bureau, Ministry of Agriculture, Forestry and Fisheries
Ms. ITAGAKI Keiko	Farmers Training	Researcher, Social Development Department, Global Link Management, Inc.
Mr. NAKAHORI Hiroaki	Planning Management	Staff, Arid and Semi-Arid Farming Area Team II, Group III, Rural Development Department, JICA
Mr. NISHIYA Mitsuo	Evaluation and Analysis	Professional Engineer, Nippon Giken Inc.

(2) The Tanzanian Team

Name	Job title	Occupation
Eng. Gabriel M. Kalinga	Team Leader / Irrigated Rice Production	Irrigation and Technical Services Division, Ministry of Agriculture and Food Security
Mr. E. N. Ndauka	Farmers Training	Crop Development Division, Crop Extension Services, Ministry of Agriculture and Food Security
Mr. James Ngwira	Planning Management	Policy and Planning Division, Ministry of Agriculture and Food Security

2. Outline of the Project

2-1 Background of the Project

The Kilimanjaro Agricultural Training Centre (hereinafter referred to as “KATC”) was established as the irrigated rice cultivation training centre in 1994. The technical cooperation, the Kilimanjaro Agricultural Training Centre Phase I Project (hereinafter referred

to as “the Previous Project”), was implemented by JICA from 1994 to 2001 for the purpose of strengthening the function of KATC.

On the basis of its achievement, the Government of United Republic of Tanzania proposed another project. It aimed to further strengthen the technical and pedagogical capabilities of KATC personnel through development of training courses to meet the needs of the model sites.

In response to this request, the Government of Japan dispatched Study Teams and as a result, the Record of Discussions on the Project for Kilimanjaro Agricultural Training Centre Phase II was signed on July 5, 2001, between the Tanzanian authorities and the Project Design Team. The Project was commenced in October 2001, and will terminate in September 2006.

2-2 Summary of the Project

(1) In Tanzania

Project Purpose: Productivity of rice increases in the model sites through the KATC's training.

Outputs:

1. The concept of and approach to the model sites are established (based on the agreement of all the stakeholders).
2. The capability of KATC in identifying training needs is improved.
3. Technical training program are strengthened to meet local needs.
4. Training program for improving institutional framework of irrigation scheme is strengthened.
5. The capability of KATC in collecting and providing useful irrigated rice cultivation information is improved.
6. The concept and approach to mainstream gender into plan, implement and monitor technical training on irrigated rice production are established.

(2) In Regional Countries

Project Purpose: Irrigated rice production techniques of field personnel and/or key farmers in the irrigated rice farming areas selected by each country are improved.

Outputs:

1. The capability of KATC in conducting the training courses in compliance with the needs of each participating country and with gender consideration is improved.
2. The capability of KATC in collecting and providing useful irrigated rice cultivation information is improved.

3. Revision of PDM and PO

A draft PDM (hereinafter referred to as "PDM3", attached herewith as "Annex 1") was formed by the Project based on the former PDM (hereinafter referred to as "PDM2", attached herewith as "Annex 2" attached to the Minutes of Meeting dated May 28, 2003) in order to make indicators more specific. Main Points of change and those reasons are listed in the table below.

According to the revision of PDM, a draft PO (attached herewith as "Annex 3") was formed by the Project.

Changes from PDM2 to PDM3

Position	Change	Reason
Indicator 1 for Project Purpose	To be revised the increment rate of the average rice yield of sample farmers of the model sites.	The baseline figures of the unit yield of rice were obtained by the VAEOs' survey carried out in mid 2003. The figures are different from the initial information stated in the IP workshops in early 2003. The target yield also may be reviewed in the workshops within the two months.
Indicator 3-4 for Output 3	Add indicator 3-4 of "Modified field training programme(s), which encourage districts to adopt KATC trainings as an implementation tool of their DADP, are developed."	Every agricultural policy/program/intervention would be in line with ASDP-DADP and DADP fund would be one of the realistic/prospective financial source, it will be quite important to modify the in-field training component/package for providing easier access to districts and thus for contributing to promotion of irrigated rice production; the overall goal of KATC II.
Activity 3	Add "3-6 Verify and confirm the applicability of KATC training programme."	The workshop(s) will be held for following purposes, inviting representatives from relevant districts responsible for those 40 irrigation schemes identified. Additional in-field training(s) will be conducted based on experiences from in-field trainings/technical assistances to model sites and information obtained in the above workshop(s).
Activities 4-1 to 4-3	Revised as "4-1 Prepare, implement and revise Implementation Plan (IP) for each model site with district, scheme, zonal irrigation office. 4-2 Improve the management of irrigators' associations/cooperative societies in model sites.	Revision of the expressions is preferable to make the scope more clear.
Important Assumptions after Activities	Add "Weather conditions remain favourable to irrigated rice farming."	The drought may significantly affect the achievement of the Outputs, as observed at Nduguti model site in 2004.

4. Results of the Evaluation with Five Criteria

4-1 Relevance

The relevance of the Project has been kept, because the Tanzanian and Japanese policy of agricultural development has not changed significantly since the commencement of the Project.

(1) Tanzanian Policy

The Project is in accordance with the national plan/programme/strategy in general. Tanzanian government has made Agricultural Sector Development Strategy (ASDS) which aims to improve agricultural productivity and profitability in order to contribute to poverty reduction and food security at farm household level, and been promoting Agricultural Sector Development Programme (ASDP) and District Agricultural Development Plan (DADP). The promotion of irrigated rice production would be one of the pillars in agricultural sector, and activities of the Project are to be continued in line with ASDP-DADP.

The Government of Tanzania has formulated the National Irrigation Master Plan (NIMP), which involves “Farmers’ participation training programme” and “Irrigated agriculture training programme for rice production”. Those two short term programmes have integrated the accomplishments of KATC.

In addition, high farmers’ demands of KATC’s irrigated rice production technologies were confirmed by the survey result on adoption rate of the techniques learned in the model sites.

(2) Japanese Policy

Japanese ODA policy to Tanzanian agriculture sector has been harmonized with the Project Purpose since the commencement of the Project.

4-2 Effectiveness

The effectiveness of the Project is expected to be high, because the Project Purpose could be achieved in general.

(1) Achievement of Project Purpose

The three indicators of the Project Purpose were assessed at the mid-point of the Project. Although the data collection is still going on in the fourth in-field training on evaluation, the Team confirmed the following information on these indicators.



- Yield rate of rice has increased in the two model sites (Mombo and Nakahuga).
- Net return rate of rice has increased in one site (Nakahuga).
- Properly irrigated area could increase through improvement of irrigation facilities and water management.

The second to fourth in-field training activities at Nduguti model site were postponed, because of very severe drought in the first crop season starting from December 2003. Therefore, special care to Nduguti farmers should be taken to enable them to catch up with the other model sites in the next crop season.

4-3 Efficiency

In general, the Inputs from the Japanese side and Tanzanian side were mostly proper. Most of the Outputs are anticipated to be achieved by the end of the Project period.

(1) Inputs from Japanese Side

Expert: JICA has dispatched eight long-term experts with following speciality; a) Chief Advisor (2 experts), b) Coordinator (2 experts), c) Extension and Farmers Training (2 experts), d) Rice Cultivation/Farming (1 expert) and e) Irrigation Management (1 expert). A total number of eleven short-term experts have been dispatched to the Project.

Counterpart Training: JICA has accepted eight Tanzanian counterparts for training in Japan as planned. The scope of the training, the number of the participants and the training period were appropriate for the Project.

Machinery and Equipment: JICA has provided machinery and equipment, and they were sufficient in quality, and most of them have been put to effective use for the Project.

Study Team: The all study teams have been dispatched as planned, and members, periods and timing of the dispatch was adequate to properly manage the Project.

(2) Inputs from Tanzanian Side

Tanzanian Personnel: The assignment of Tanzanian personnel has been implemented as planned. Technical level of the 34 counterpart personnel assigned was mostly appropriate for the implementation of the Project.

Local Running Expenses: The budget from the Tanzanian side has not been disbursed as planned. The disbursed amount was far below the amount needed for the operation of the Project.

Land, Buildings and Facilities: The necessary land, building and other facilities have been

allocated properly to implement the Project as planned.

(3) Outputs

Most of the Outputs are expected to be achieved, because these have been achieved at certain level at the time.

Output 1: The concept of and approach to the model sites have been established and six model sites have been selected.

Output 2: The capability of KATC in identifying training needs could be improved more through the continuous implementation of the field trainings as planned.

Output 3: Technical training program could be strengthened to meet local needs, because the adoption rate of the techniques is sufficiently high in the first crop season and the technical standards on rice cultivation will be prepared through the field evaluations, which are going on.

Output 4: Training program for improving institutional framework of irrigation scheme could be strengthened, because the farmers' organisations (i.e. irrigators' associations) and the supporting government agents are stimulated by the Project implementation so far.

Output 5: It is necessary to accelerate improvement of the KATC's capacity in collecting and providing useful irrigated rice cultivation information, because the achievement rate for this matter has been low at the mid-term.

Output 6: The concept and approach to mainstream gender into plan, implement and monitor technical training on irrigated rice production are established.

4-4 Impact

At the mid-point of the Project, some positive and negative impacts were reported by the Project staff, as follows.

Positive impacts:

- Improvement of living standard (school fees, modern houses, toilets, bicycles, etc.)
- Strong support of district governments to the Project (contribution of transportation costs and allowances, and provision of revolving fund, etc.)
- Participation of neighbouring farmers of the model sites to the in-field trainings
- Reduction of workload of females

Negative impact:

- Some males spend more money for drinks

4-5 Sustainability

There are financial difficulties in the sustainability of the Project at the time of the Mid-term Evaluation.

(1) System

KATC is recognized as the unique training centre specialized on irrigated rice cultivation. Furthermore, many farmers supported by foreign donors (the World Bank, FAO, etc.) participate in KATC residential courses or in-field trainings (Mombo and Mbuyuni sites).

The human resources of KATC are good enough, although some capacity building is necessary in the Project. The Previous Project established fundamental curriculum and training materials and the Project is establishing practical ones for participatory training/extension techniques. By the end of Project, it would be possible for KATC to be capable to provide both basic and practical training courses. KATC staff have to be capable in providing logistics, especially scheduling and arranging in in-field trainings, and also evaluation, in terms of quality management of training.

(2) Technology

The technical level of KATC staff is high enough to carry out the farmers trainings, because the counterpart personnel are knowledgeable, experienced and more confident in particular techniques in rice production, participatory training/extension methods through the project implementation.

Most of the key and intermediate farmers have already started to adopt the appropriate techniques learned in the trainings. As these techniques are rather simple and require small cost, they will be able to sustain in the model sites and expand into neighbouring areas.

(3) Finance

Although KATC receives relatively large budget compared to other institutes, the amount is not enough to implement all training courses. Under ASDP-DADP there will be chances for KATC to carry out training of farmers and agricultural field officers by using DADP budget.

Both Tanzanian and Japanese Governments agreed in M/M previously, 20% of income on Self Help Fund to be disbursed for Project activity. In FY 2003, KATC reports to have spent 38% of SHF income for the Project Purpose mostly on repair and maintenance of equipment/facilities and allowances for its staff.

5. Conclusion

5-1 In Tanzania

The Team evaluated the Project in line with the five evaluation criteria based on the findings obtained from field observations and a series of discussions with those who are involved in the Project.

In Tanzania, the government has made considerable endeavors to develop irrigation facilities, while the level of irrigated rice farming technologies of the farmers still remains low. The Project aims at providing technical training that fits to local conditions, thus at solving various problems of the farmers in different irrigation schemes in Tanzania. The Team concludes that the relevance of the Project has still been very high, since it was confirmed that the government policies and priorities consistently put emphasis on the development of the irrigated rice farming in those scheme areas.

As to the efficiency of the Project, the Team considers that the Project is being implemented efficiently, since most of the Activities have been implemented as scheduled by the efforts of relevant personnel and staff of the Project, despite the fact that a part of the planned activities has been hampered due to the weather conditions.

There are positive findings in terms of technical sustainability of the Project, such as adoption of learnt technologies among the farmers in the model sites, higher recognition of KATC as training institution, and so forth. Nevertheless, financial sustainability of the Project activities was evaluated as being low at this point of time since the total budget of KATC is not sufficient enough, although the government has provided larger budget to KATC compared to the ones to other training institutes.

Based on the findings mentioned above, the Team agrees on that there has not been any serious problem in the planned activities and process of their implementation for the first half period of the Project that should require special measures to be taken. In the later half of the Project, the Activities will focus on the development and dissemination of technical package for the model sites to improve the productivity. The Team concludes as an overall evaluation that the possibility for the Project to attain the Project Purpose by the end of the Project is quite high, once the Project would carefully take into consideration the recommendations mentioned in the section 6.

5-2 In Regional Countries

The Team reviewed the progress of the Project activities in the regional countries and found that the planned activities have duly been conducted. The KATC training for farmers and extension officers has highly been appreciated in respective countries, and the KATC staff

could obtain wider experiences to try out the farmer-to-farmer training approach in situations different from the Tanzanian setting.

Thus the Team concludes that the applicability of the rice farming technologies and training know-how of KATC to the neighbouring countries is high, and that KATC is gaining the capacity to serve as the training institute specialized in irrigated rice farming not only for Tanzania but also for the regional countries.

6. Recommendations

(1) Revision of PDM and PO

The Team proposes the revision of PDM and PO as attached in Annex 1 and Annex 3. The Project should take early measures to revise the indicator to measure the attainment of Project Purpose that is related to the production increase based on more reliable figures after the proper endorsement by the Joint Coordinating Committee on the revision, since the basis of the present figures was found to be inaccurate.

(2) The RTCPP

At the TICAD III held in Tokyo, Japan in October 2003, the necessity of further promotion of rice farming in Africa was strongly recommended. The KATC can be recognized as a quite unique training institution in terms of that it is specialized in irrigated rice farming, and that it provides training not only to the extension officers but directly to farmers.

Hence, it is clarified that the RTCPP is to implement on the trial basis the KATC training on irrigated rice farming in Kenya, Zambia, Malawi and Uganda where development of irrigated rice farming are being emphasized, in order to disseminate as well as to seek applicability of technologies and training know-how accumulated in KATC.

(3) Model Sites

1) Additional model site

The model sites of the Project have been selected as those representing the six irrigation zones in Tanzania. It was proposed to add one more model site since there has been a change in the zoning to divide them into seven now.

As the site selection process would require various surveys and social preparation work, it may not practically be feasible to add one model site where the same degree of intervention should be carried out from the mid-term stage of the Project. However,

since the Project is planning to develop a modified package of training in the later half of the Project period, it is worthy to examine the possibility to include an additional site where the modification trials are to be conducted. Such addition may also contribute to serve to a larger clientele at the field level.

2) Nduguti Model Site

Despite the fact that the Project activities in one of the model sites, i.e. Nduguti, has badly been affected by the drought, it is recommended that the site should continue being a model, and that the farmer representatives should be provided with the opportunities to benefit from the whole cycle of the in-field training. It may be one of the practical options to facilitate them to attend the training in nearby model sites, such as Mwamapuli.

3) Promotions of the expansion effects of the Project activities

The Team recommends that the Project should not only develop the modified training packages, but also examine continuously measures to maximize the spreading effects of the approach of farmer-to-farmer training and participatory extension in these model sites. It is also essential for the districts and MAFS to ensure that farmers' organizations are established, registered and assisted to perform their duties in proper manners, since such organizations can play vital roles in spreading out the effects of the training.

(4) Institutional and Financial Sustainability of KATC

As previously mentioned in section 4-5, there are aspects to further be monitored in terms of institutional and financial sustainability of KATC.

As to the institutional aspects, it is essential to clarify the status of KATC within the framework of irrigation development plan of the country as a policy of the government. It is also important for KATC and MAFS (DTI and DITS) to collaborate on training opportunities for the KATC staff at all levels of education, including long-term training.

As to the financial aspects, there may be various options to stabilize the financial conditions of KATC, amongst which the Team recommends that KATC should further strengthen the collaboration with district administrations so as to be entrusted with training activities to be implemented under ASDP-DADP, and that MAFS would continue its efforts to allocate more recurrent cost to KATC.

(5) Public Relations (PR) of the Project Activities

To further obtain general recognition on KATC and the Project, it is expected that the Project would continue and enhance the PR activities on the Project through a variety of means, including mass media, Internet websites, and seminars.

(6) Equipment

There are equipment procured during the Previous Project which are essential for the implementation of the Project such as computers and vehicles. The Team found many of such equipment in the deteriorated conditions, thus recommends that there is a need to replace them with new ones.

(7) Management of the Project

It is recommended that the Project should further gear its activities to establish the information management system (IMS). The IMS should also be supported in terms of operational funds, enhancement of staff and equipment.

Through the experience of this Mid-term Evaluation, the Team noted the necessity for the Project to further collaborate with MAFS in conducting its regular monitoring and internal evaluation.

(8) Technical Issues

The Team recommends that the aspect of irrigation efficiency should further be emphasized in the KATC training related to water management so as to foster the awareness among the farmers in the model sites.

As to the expansion of the farm management technologies, it is recommended that the farmers of the model sites should be urged to fabricate themselves or to identify local fabricators of simple farming tools such as push weeders, threshing stands and so forth after the training and that the KATC should make follow-ups in this regard.

**Revised Project Design Matrix (PDM):
The Kilimanjaro Agricultural Training Centre Phase II Project in Tanzania**

Duration : 2001.10.1 ~ 2006.9.30

Target Group: Rice farmers in the irrigation schemes

Project Area: selected irrigation schemes

Date: 25 May, 2004

In Tanzania

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal Living standards of rice farmers in the irrigation schemes are			There are no major policy changes.
Overall Goal Productivity of rice increases in the place where KATC training has been conducted and surrounding area.	1 Average rice yield of sample farmers in the training conducted sites and surrounding area increase by 25 % by 2010 compared to the national average of 2002 (2.5t/ha). 2 By 2010, the net return rate from rice to family farm in the training conducted sites and surrounding area increase compared to those of 2002. (for the formula of the net return rate, see Annex.1.)	1.Base line survey 2.Ex-participants report 3.Monitering report	Income is used for better living standards.
Project purpose Productivity of rice increases in the model sites through the KATC's training.	1 Average rice yield per unit area of sample farmers in model sites increase by 9-24% by 2005 compared to 2002 (for details, see Annex.2). 2 By 2005, the net return rate from rice in all the model sites increase compared to those of 2002. 3 By 2005, properly irrigated area increase in all the model sites compared to those	1.Base line survey 2.Ex-participants report 3 Local consultant survey report 4.Farming survey (Targets are 20 Key Farmers, 30 Intermediate Farmers and 10	No agricultural policy changes.
Outputs 1 The concept of and approach to the model sites are established (based on the agreement of all the stakeholders). 2 The capability of KATC in identifying training needs is improved. 3 Technical training program are strengthened to meet local needs.	1 By the end of August, 2002, six (6) model sites are selected on the basis of the criteria. 2-1 At the beginning of every training course, more than 90% of course participants agree with the course contents as relevant to their needs. 2-2 In more than 80% of training courses, more than 80% of training participants rank A or B in questionnaire. (Evaluation will be done by 5-graded form (A:Excellent, B:Very Good, C:Good, D:Fair or Satisfactory, E:Poor) 3-1 By 2005, 80% of Key Farmers adopt at least 80% of basic field techniques learnt and 80% of Intermediate Farmers adopt at least one basic field technique learnt. (for the items of basic field techniques. see Annex.3.) 3-2 By 2005, technical standards on rice cultivation are established in all model sites through field trial activities conducted by field personnel and key farmers. (for the items of technical standards, see Annex.4) 3-3 By 2005, the final versions of technical manuals for each model site is prepared based on local needs. 3-4 Modified field training programme(s), which encourage districts to adopt KATC trainings as an implementation tool of their DADP, are developed.	1.Minutes of Joint Coordinating Committee 2.Criteria 1.Training report 2.Questionnaire 3.Evaluation for each training 1.Training report 2.Monitoring report 3.Technical standards summarised by Rice Cultivation section 4.Local consultant survey report 5.Farming survey 6. Training report	The ex-participants remain in the irrigation scheme. District levels recognise the importance of improved rice farming and implement extension

<p>4 Training program for improving institutional framework of irrigation scheme is strengthened.</p>	<p>4-1 Implementation plan (IP) for each model site is prepared, implemented, and revised based on the implementation result jointly by district, scheme, zonal irrigation office and KATC, with the special emphasis on cost sharing. 4-2 By 2005, farm operation calendars and plans are prepared, carried out and evaluated by managing personnel, key farmers and intermediate farmers in each model site. (Farm operation calendars and plans include; farm operation, water distribution plan, canal maintenance and management plan, and organisational 4-3 By 2005, active membership of irrigators' association/cooperative societies in each model site increase compared to 2002. ("Active members" are paying membership fee and participating O&M activities.) 4-4 The manual/guide for strengthening institutional framework is prepared by the end of the project.</p>	<p>1. Training report 2. Farm operation calendar 3. Evaluation report 4. Interview 5. Seminar and workshop proceedings 6. Local consultant survey report 7. Field survey</p>
<p>5 The capability of KATC in collecting and providing useful irrigated rice cultivation information is improved.</p>	<p>5-1 By 2006, library database and classified information database are established. 5-2 By 2006, four Kiswahili & two English newsletters in a year and annual technical progress reports are prepared, and web-site of KATC is established and revised on monthly basis.</p>	<p>1. Database 2. Newsletters, progress report</p>
<p>6 The concept and approach to mainstream gender into plan, implement and monitor technical training on irrigated rice production are established.</p>	<p>6-1 Project activities are implemented according to the gender checklist based on Plan of Operation. 6-2 Through the project period, the percentage of women participants in Key Farmers course and in-field training is more than 45% by considering gender needs in 6-3 By 2006, at least one specialized subject training based on Gender needs is conducted for and the activity is adopted in each model site.</p>	<p>1. Baseline survey report 2. Training report 3. Monitoring report 4. Local consultant survey report 5. Gender checklist</p>

Activities	Inputs		Important Assumptions
<p>1-1 Study the situation of selected 40 irrigation schemes in order to determine their potential for development. 1-2 Conduct the group training courses on irrigated rice production techniques for scheme managers, field personnel and key farmers of the selected 40 irrigation schemes. 1-3 Select model sites based on the criteria to be agreed. 2-1 Conduct surveys to identify the situation and problems and to collect baseline data for monitoring. 2-2 Conduct analysis of the information collected. 3-1 Prepare the activity plan to improve irrigated rice production techniques in each model site. 3-2 Conduct the training courses on irrigated rice production techniques for field personnel and key farmers (with special consideration for women farmers) of the model site at KATC. 3-3 Conduct the field training with irrigated rice production skills for field personnel and key farmers (with special consideration for women farmers) in each model site. 3-4 Provide technical assistance to the ex-participants on irrigated rice production at the model site. 3-5 Monitor the activities of ex-participants in each model site. 3-6 Verify and confirm the applicability of KATC training programme. 4-1 Prepare, implement and revise Implementation Plan (IP) for each model site with district, scheme, zonal irrigation office. 4-2 Improve the management of irrigators' associations/cooperative societies in model sites.</p>	<p>Japanese side 1. Dispatch of Japanese Experts (1) Long-Term Experts (maximum 5 persons) Chief Advisor Coordinator Other Long-Term experts • Extension and farmers training • Rice cultivation • Irrigation management • Farming Management (2) Short-Term Experts 2. Provision of Machinery and Equipment 3. Training of Tanzanian Counterpart Personnel in Japan 4. Dispatch of a Survey Team</p>	<p>Tanzanian side 1. Assignment of Tanzanian Personnel (1) Project Director (2) Project Manager (3) Counterpart personnel in the field of • Extension and farmers training • Rice cultivation • Irrigation Management • Farming Management (4) Counterpart personnel for short-term Experts (5) Administrative personnel (6) Other necessary personnel mutually agreed upon as necessary 2. Local Running Expenses 3. Provision of lands, buildings and other necessary facilities</p>	<p>Weather conditions remain favorable to irrigated rice farming.</p>



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- 5-1 Establish information management system.
 - 5-2 Collect and classify the information.
 - 5-3 Supply the information to the concerned organisations and
- [Gender related activities are reflected on above activities. They are not treated as the independent field.]*
- 6-1 Identify Gender training needs of selected model sites and integrate them into Implementation plan.
 - 6-2 Plan, conduct and monitor the technical training of irrigated rice production with gender consideration.
 - 6-3 Organise gender related information on irrigated rice production.

Pre-conditions
Rice farmers in the selected irrigation schemes agree with the objectives of the project.
Security situation of the country remains stable, and safety of property at KATC is assured.

*sample farmer : directly and indirectly contacted farmer

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**Present Project Design Matrix (PDM):
The Kilimanjaro Agricultural Training Centre Phase II Project in Tanzania**

Duration : 2001.10.1 ~ 2006.9.30

Target Group: Rice farmers in the irrigation schemes

Project Area: selected irrigation schemes

Date: 28/ May, 2003

In Tanzania

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal Living standards of rice farmers in the irrigation schemes are			There are no major policy changes.
Overall Goal Productivity of rice increases in the place where KATC training has been conducted and surrounding area.	1 Average rice yield per unit area of sample farmers in the training conducted sites and surrounding area increase by 25 % by 2010 compared to the national average of 2002 (2.5t/ha). 2 By 2010, the net return rate from rice to family farm in the training conducted sites and surrounding area increase compared to those of 2002. (for the formula of the net return rate, see Annex.1.)	1.Base line survey 2.Ex-participants report 3.Monitering report	Income is used for better living standards.
Project Purpose Productivity of rice increases in the model sites through the KATC's training.	1 Average rice yield per unit area of sample farmers in model sites increase by 9-24% by 2005 compared to 2002 (for details, see Annex.2). 2 By 2005, the net return rate from rice in all the model sites increase compared to those of 2002. 3 By 2005, properly irrigated area increase in all the model sites compared to those	1.Base line survey 2.Ex-participants report 3.Local consultant survey report 4.Farming survey (Targets are 20 Key Farmers, 30 Intermediate Farmers, and 10 other farmers.) (5. Yield survey)	No agricultural policy changes.
Outputs 1 The concept of and approach to the model sites are established (based on the agreement of all the stakeholders) 2 The capability of KATC in identifying training needs is improved. 3 Technical training program are strengthened to meet local needs.	1 By the end of August, 2002, six (6) model sites are selected on the basis of the criteria. 2-1 At the beginning of every training course, more than 90% of course participants agree with the course contents as relevant to their needs. 2-2 In more than 80% of training courses, more than 80% of training participants rank A or B in questionnaire. (Evaluation will be done by 5-graded form (A:Excellent, B:Very Good, C:Good, D:Fair or Satisfactory, E:Poor) 3-1 By 2005, 80% of Key Farmers adopt at least 80% of basic field techniques learnt and 80% of Intermediate Farmers adopt at least one basic field technique learnt. (for the items of basic field techniques, see Annex.3.) 3-2 By 2005, technical standards on rice cultivation are established in all model sites through field trial activities conducted by field personnel and key farmers. (for the items of technical standards, see Annex.4) 3-3 By 2005, a final version of technical handbook for each model site is prepared based on local needs.	1.Minutes of Joint Coordinating Committee 2.Criteria 1.Training report 2.Questionnaire 3.Evaluation for each training 1.Training report 2.Monitoring report 3.Technical standards summarised by Rice Cultivation section 4.Local consultant survey report 5.Farmine survey	The ex-participants remain in the irrigation scheme. Regional levels recognise the importance of improved rice farming and implemment extension

<p>4 Training program for improving institutional framework of irrigation scheme is strengthened.</p>	<p>4-1 By 2005, farm operation calendars and plans are prepared, carried out and evaluated by managing personnel, key farmers and intermediate farmers in each model site. (Farm operation calendars and plans include; farm operation, water distribution plan, canal maintenance and management plan, and organisational activity plan.) 4-2 By 2005, active membership of farmers' organisation (i.e. irrigators' association) in each model site increase compared to 2002. ("Active members" are paying membership fee and participating O&M activities.) 4-3 Implementation plan (IP) for each model site is prepared, implemented, and revised based on the implementation result jointly by district, scheme, and KATC, and there is cost-sharing in this cycle. 4-4 The manual/guide for strengthening institutional framework is prepared.</p>	<p>1.Training report 2.Farm operation calendar 3.Evaluation report 4.Interview 5.Seminar and workshop proceedings 6.Local consultant survey report 7.Field survey</p>
<p>5 The capability of KATC in collecting and providing useful irrigated rice cultivation information is improved.</p>	<p>5-1 By 2006, library database and classified information database are established. 5-2 By 2006, bi-monthly newsletters and annual progress reports on technical matters are prepared, and web-site of KATC is established and revised on monthly basis.</p>	<p>1.Database 2.Newsletters, progress report 3.Web-site 4.Local consultant survey report</p>
<p>6 The concept and approach to mainstream gender into plan, implement and monitor technical training on irrigated rice production are established.</p>	<p>6-1 Project activities are implemented according to the gender checklist based on Plan of Operation. 6-2 Through the project period, the percentage of women participants in Key Farmers course and in-field training is more than 45% by considering gender needs in model sites. 6-3 By 2006, at least one training subject based on women farmers' needs is implemented in each model site.</p>	<p>1.Baseline survey report 2.Training report 3.Monitoring report 4.Local consultant survey report 5.Gender checklist</p>

Activities	Japanese side	Tanzanian side	Important Assumptions
<p>1-1 Study the situation of selected 40 irrigation schemes in order to determine their potential for development. 1-2 Conduct the group training courses on irrigated rice production techniques for scheme managers, field personnel and key farmers of the selected 40 irrigation schemes. 1-3 Select model sites based on the criteria to be agreed. 2-1 Conduct surveys to identify the situation and problems and to collect baseline data for monitoring. 2-2 Conduct analysis of the information collected. 3-1 Prepare the activity plan to improve irrigated rice production techniques in each model site. 3-2 Conduct the training courses on irrigated rice production techniques for field personnel and key farmers (with special consideration for women and young farmers) of the model site at KATC 3-3 Conduct the field training courses with irrigated rice production skills for field personnel and key farmers (with special consideration for women and young farmers) in each model site. 3-4 Provide technical assistance to the ex-participants on irrigated rice production at the model site. 3-5 Monitor the activities of ex-participants in each model site.</p>	<p>Japanese side 1.Dispatch of Japanese Experts (1)Long-Term Experts (maximum 5 persons) Chief Advisor Coordinator Other Long-Term experts <ul style="list-style-type: none"> • Extension and farmers training • Rice cultivation • Irrigation management • Farming Management (2)Short-Term Experts 2.Provision of Machinery and Equipment 3.Training of Tanzanian Counterpart Personnel in Japan 4.Dispatch of a Survey Team</p>	<p>Tanzanian side 1.Assignment of Tanzanian Personnel (1)Project Director (2)Project Manager (3)Counterpart personnel in the field of <ul style="list-style-type: none"> • Extension and farmers training • Irrigation Management • Farming Management (4)Counterpart personnel for short-term Experts (5)Administrative personnel (6)Other necessary personnel mutually agreed upon as necessary 2. Local Running Expenses 3.Provision of lands, buildings and other necessary facilities</p>	

- 4-1 Prepare the activity plan to improve the framework for irrigated rice production for each model site.
- 4-2 Conduct seminars and workshops for farmers, scheme managers, local government personnel, and other related organisations.
- 4-3 Conduct field training courses in the model site on the management of irrigators' associations/cooperative societies and other farmers' organisations for scheme managers, field personnel and key farmers (with special consideration for women and young farmers).

- 5-1 Establish information management system.
- 5-2 Collect and classify the information.
- 5-3 Supply the information to the concerned organisations and individuals.

- Gender related activities are reflected on above activities. They are not treated as the independent field.
- 6-1 Identify women's training needs of selected model sites and integrate them into action plan.
- 6-2 Plan, conduct and monitor the technical training of irrigated rice production with gender consideration.
- 6-3 Plan, conduct and monitor the institutional framework of irrigated rice production with gender consideration.
- 6-4 Organise gender related information on irrigated rice production.

Pre-conditions

Rice farmers in the selected irrigation schemes agree with the objectives of the project.
 Security situation of the country remains stable, and safety of property at KATC is assured.

*sample farmer : directory and indirectly contacted farmer

Plan of Operations

Activities		Target (Output)	Schedule (Calendar Year)															Responsible Person / Section	Implementer	Input	Remarks		
			2001			2002			2003			2004			2005							06	
			4	1	2	3	4	1	2	3	4	1	2	3	4	1	2					3	4
3-4-6-2	Hold annual evaluation at KATC..																		Academic Dept.	All sections			
3-4-6-3	Make a report.	Report																	Academic Dept.	All sections			
3-5	Monitor the activities of ex-participants in each model site.																						
3-5-1	Prepare monitoring format.	Monitoring formats																	EFT	All sections			
3-5-1-1	Photographic data format	Format																	EFT	All sections			
3-5-1-2	Monitoring format for action plans	Format																	FD	All sections	Short term expert.		
3-5-1-3	Farm record format (incl. Household activities and expenditure)	Format																			C/P training		
3-5-1-4	Field trials format	Format																	RC	RC			
3-5-1-5	Monitoring format for extension activities (VEO and key farmers)	Format																	EFT	All sections			
3-5-1-6	Monitoring format for water management	Format																	WM	WM			
3-5-1-7	Format for monitoring general situation of the model sites (e.g. school, children, shops, roads, etc.)	Format																	Academic Dept.	All sections			
3-5-2	Conduct participatory monitoring.	Information																				Consider gender balance of the participants	
3-5-2-1	Organize farmers meeting to discuss progress of their activities	Meeting																	EFT	All sections, Schemes			
3-5-2-2	Review and modify the action plan in each training course	Modified action plans																	All sections	All sections, Schemes			
3-5-2-3	Recording the demonstration activities	Records and data																	EFT	Relevant persons in model sites		Check the validity of the records	
3-5-2-4	Recording the field trial activities and results	Records and data																	RC	Relevant persons in model sites			
3-5-3	Process the data and interpret the results.	Monitoring reports																			Short term expert		
3-5-3-1	Prepare the database structure.	Database structure																	All sections	All sections			
3-5-3-2	Input data.	Data-base																	All sections	All sections			
3-5-3-3	Analyze data.	Analyzed data																	All sections	All sections		Consider gender aspects	
3-5-3-4	Preparation of report	Report																	All sections	All sections			
3-5-4	Evaluate the monitoring activities (including feedback).	Evaluation report																					
3-5-4-1	Conduct meetings for evaluation in model sites.	Improved activities																	KATC	KATC and relevant persons in model sites			
3-5-4-2	Prepare report	Report																	All sections	All sections		Including reviews in terms of gender mainstreaming	
3-6	Verify and confirm the applicability of KATC training programme	Verified field training																					
3-6-1	Conduct workshop with stakeholders (40 irrigation schemes, relevant districts, Zonal irrigation office, MAFS, etc.)	Proceeding																	All section	All section			
3-6-1-1	Prepare procedure for conducting verification																						
3-6-1-2	Select the site(s) to conduct the verification training																						
3-6-2	Conduct the training																		All section	All section			
3-6-2-1	Plan training schedule and curricula	Curricula																					
3-6-2-2	Prepare teaching material	Teaching material																					
3-6-2-3	Conduct the training in the selected site(s)																						
3-6-3	Monitor and evaluate the training																		All section	All section			

Plan of Operations

Activities		Target (Output)	Schedule (Calendar Year)												Responsible Person / Section	Implementer	Input	Remarks						
			2001			2002			2003			2004							2005			06		
			4	1	2	3	4	1	2	3	4	1	2	3					4	1	2	3	4	
5-1-1-2	Allocate a room for the information unit and modify the room	Room																	KATC, Principal Academic Dept.	KATC, Principal Academic Dept.				
5-1-1-3	Install hardware and software	Hardware and software																						
5-1-2	Recruit and train personnel.	Qualified personnel																						
5-1-2-1	Recruit personnel	Personnel																	DTI Academic Dept.	DTI Academic Dept.				
5-1-2-2	Train recruited personnel	Qualified personnel																						
5-1-3	Establish appropriate system for running the information unit.	Operation regulation																						
5-1-3-1	Study other information units.	Report																	IU Academic Dept.	All sections				
5-1-3-2	Set regulations of the unit.	Regulations																						
5-2	Collect and classify the information.																				Books			
5-2-1	Establish a system for acquiring information.	System																	IU	All sections				
5-2-1-1	Establish system to collect information within KATC.	Information																						
5-2-1-2	Establish system to collect information from other institutions.	Information																						
5-2-2	Establish information storing and handling system.																							
5-2-2-1	Compile information. (Digitize, bind, file, etc.)	Compiled information																	IU	IU				
5-2-2-2	Store and organize the information obtained.	Stored information																	IU	IU				
5-2-2-3	Prepare the handling procedure.	Procedure																	IU	IU				
5-3	Supply the information to the concerned organizations and individuals.																							
5-3-1	Publish and distribute periodical newsletters.	Newsletters Distribution list																	Academic Dept.	All sections				
5-3-1-1	Prepare subscribers/ mailing lists.	Lists																						
5-3-1-2	Hold editorial meetings.	Meeting																						
5-3-1-3	Compile articles and edit.																							
5-3-1-4	Print and bind newsletters.	Printed newsletters																						
5-3-1-5	Distribute newsletters.	Distribution lists																						
5-3-2	Publish and distribute leaflets, booklets and annual technical progress report.	Leaflets Booklets Annual technical progress report Distribution list																	Academic Dept.	All sections				
5-3-2-1	Determine clients.																							
5-3-2-2	Hold editorial meetings.	Meeting																						
5-3-2-3	Design and draft leaflets and booklets.	Draft																						
5-3-2-4	Print and bind leaflets and booklets.	Printed leaflets and booklets																						
5-3-2-5	Distribute leaflets and booklets.	Distribution lists																						
5-3-3	Respond to relevant inquiries.	Records																	IU	All sections				
5-3-3-1	Set regulations on handling and delivering information.	Regulations																						
5-3-3-2	Respond to inquiries and provide information.	Records																						

