Summary of Terminal Evaluation

<table>
<tr><td colspan="3">1. Outline of the Project</td></tr>
<tr><td colspan="2">Country：Republic of Kenya</td><td>Project Title：The Project for Sustainable Smallholder Irrigation Development and Management in Central and Southern Kenya</td></tr>
<tr><td colspan="2">Issue/Sector：Agriculture and Rural Development</td><td>Cooperation Scheme：Technical cooperation</td></tr>
<tr><td colspan="2">Division in Charge：JICA Kenya Office</td><td>Total Cost（as of FY2009）：235 million yen</td></tr>
<tr><td rowspan="3">Period of Cooperation</td><td rowspan="3">（R/D）：
10th December 2005
to 10th December 2010</td><td>Partner Country's Implementation Organization：Ministry of Water and Irrigation</td></tr>
<tr><td>Supporting Organization in Japan：JICA Tsukuba International Center</td></tr>
<tr><td>Related Cooperation Project：Implementation bodies and stakeholders of similar JICA technical cooperation projects under implementation in Thailand, the Philippines, Egypt, Tanzania and Malawi</td></tr>
<tr><td colspan="3">1-1 Background of the Project
Kenya agriculture is mainly rain-fed instead of 85％ of the country being Arid and Semi-Arid Lands. Irrigation development in Kenya is still low with only 125,000 ha is development against a potential of 540,000 ha（approximately 23％）mainly through smallholder or private commercial farmers. GOK highlights the importance of irrigation development and improvement of agriculture productivity in Vision 2030 as well as draft National Irrigation and Drainage Policy（to be approved by the Cabinet of Kenya）. In particular, sustainable smallholder irrigation development is an urgent agenda to GOK.

JICA provided assistance to GOK in conducting a mini-project type of technical cooperation in smallholder irrigation development from August 2000 to 2003. The main outputs of the cooperation were 1）guideline for smallholder irrigation development, 2）framework for formation and management of irrigation water users association, and 3）training master plan for irrigation personnel. In order to verify the outputs of the Mini-Project, the Government of Kenya（GOK）proposed to the Government of Japan（GOJ）to support the Project on Sustainable Smallholder Irrigation Development and Management in Central and Southern Kenya（SIDEMAN Project）. Based on the request from GOK and the results of the preliminary study conducted by JICA, SIDEMAN Project began its implementation in December 2005.

1-2 Project Overview
（1）Overall Goal
The methodology established through the Project will be used for other smallholder irrigation scheme development.

（2）Project Purpose
Methodology for the development of sustainable smallholder irrigation system is verified in the selected schemes.

（3）Outputs
Output 1：Irrigation infrastructures of pilot sites are provided.</td></tr>
</table>

Output 2：WUAs of pilot sites are responsible for O & M of the irrigation system.
Output 3：Capacity of IDD and farmers are improved.

（4）Inputs （at the time of terminal evaluation）

Japanese side：

Long-term experts 3persons	Equipment 16.6 million yen
Short-term experts 4persons	Local cost 92.5 million yen
Counterpart training received 4persons	Others 125.7 million yern

Kenyan side：

Counterpart 25persons	Equipment N/A
Facility Office space for the experts, etc	Local cost 47.5 million KSH（to be estimated）

2．Evaluation Team

Members of Evaluation Team	Mr. Hideyuki Kanamori, Team leader, Senior Advisor, JICA Mr. Naoyuki Matsuoka, Irrigation Policy, Irrigation Advisor, MWI Ms. Kinuko Mitani, Evaluation Analysis, Consultant, IC Net Limited Mr. Shinichi Saito, Evaluation Planning, JICA Kenya Office Mr. Sebastian Odanga, Evaluation Member, Consultant, JICA Kenya Office	
Period	June 27, 2010 ～ July 19, 2010	Type of Evaluation：Terminal

3．Results of Evaluation

3-1 Project Performance

The project purpose “Methodology for the development of sustainable smallholder irrigation system is verified in the selected schemes” is expected to be achieved according to the verifiable indicators stated in PDM（version 1）. It is expected that the Project will confirm the achieved rate/percentage/figures against the indicators by the end of the project period.

3-2 Summary of Evaluation Results

（1）Relevance

Relevancy of the SIDEMAN Project is continued to be high. The Project is in line with the development policy and strategy of both GOK and GOJ. The same is applied to the overall goal, the project purpose and the target group of the Project. A draft National Irrigation and Drainage Policy prioritizes smallholder irrigation development as one of the strategic approaches to exploit exiting irrigation, and makes reference of the three guidelines under revision.

（2）2Effectiveness

Effectiveness of the SIDEMAN Project is high. The project purpose will be achieved by the end of the SIDEMAN Project as long as the approved activities are completed as per the mid-term evaluation. Despite the fact that the outputs and activities are not fully completed, the verifiable indicators set for the project purpose is already achieved for the most part.

（3）「Efficiency

Efficiency of the SIDEMAN Project is moderate. There is no problem in regard to the inputs provided by the Kenyan side. Likewise, there is no major problem in relation to the inputs made by the Japanese side. The Counterpart training, Technical Exchange and other activities carried out in the Project was highly appreciated by the persons involved in the Project.

（4） Impact

There is significant impact from the SIDEMAN Project. One of the major positive impacts is the development of farmers' capacity who has been involved in the pilot schemes construction/rehabilitation and O & M. One of the negative impacts is the organizational and financial status of MWI. It is expected to be a big challenge for MWI to continue the same level of technical assistance extended to farmers without JICA's assistance.

（5） Sustainability

Sustainability of the SIDEMAN Project will be high. Organizational/financial aspect, technical aspect, and social/environmental aspect of the project sustainability are as follows.

- Organizational/Financial : Both promoting and inhibiting factors have been identified at the time of the terminal evaluation. One of the promoting factors is the smooth implementation of the verified smallholder irrigation development methodology to some extent. The methodology confirmed the applicability and viability of the methodology to the target group and areas.
- Technical : Knowledge and skills on smallholder irrigation development（i.e., construction, rehabilitation, O & M, etc）acquired by the project counterparts and stakeholder have been enhanced in the course of the project implementation. The equipment（i.e., AutoCAD, Total Station）provide by the Japanese side have been utilized and maintained by the counterparts in an effective manner.
- Social/Environmental : There are promoting factors for sustainability in view point of gender and community empowerment and poverty reduction. One is enhanced inclusion of women and other vulnerable groups in community development such as the methodology applied in the Project. The Other one is enforcement of environmental impact assessment（EIA） conduction. Selected staff members of MWI have been trained to conduct EIA under the Project. The trained staff members will be mobilized in conducting EIA even after the end of the Project.

3-3 Factors Promoting Better Sustainability and Impact

（1） Factors concerning to Planning

- The methodology applied in the Project encouraged and improved farmers' participation.
- Capacity of farmers in smallholder irrigation development/rehabilitation as well as O & M was enhanced as the results of the methodology developed by the Project.
- The Project mobilized third country expert（s） as input from the Japanese side to meet the needs of the target group/area.

（2） Factors concerning to Implementation Process

- There is a positive change among the farmers in regard to the level of participation and ownership to the concerned schemes.
- As the results of the constructed/rehabilitated schemes, some farmers have benefitted from the increased availability of irrigated water, which contributed in farming productivity.
- The farmers were exposed to alternative means of income generation. Some farmers have established fish pond to grow fish for sale in collaboration with the Ministry of Fisheries Development.

3-4 Factors Inhibiting Better Sustainability and Impact

（1） Factors concerning to Planning

- The project cost was underestimated at the time of the preliminary study. Thus the Project had to reduce the coverage areas/approach of irrigation development.

・The Project was planned to revise the three Outputs, which were produced in the JICA Project implemented from 2000 to 2003. However, there was no activity indicating such revision of the guidelines. Therefore, the revision of the guidelines is not yet completed.

（2） Factors concerning to Implementation Process

・There is a room for improvement（i.e., communication, monitoring, reporting）in project management to some extent to become more effective, which will contribute in the achievement of the project purpose as well as the overall goal

・In regard to decision-making and backstopping, the established reporting line by MWI（HQ→Province →District） was not respected/followed by the Project. Due to lack of clarity of roles and responsibilities of irrigation officers at Province level, their involvement was very limited.

3-5 Conclusion

The Joint Evaluation team confirmed that the SIDEMAN Project partially demonstrated the effectiveness of the methodology implemented in the Project. For example, enhanced participation of farmers in the development resorting in farmers' contribution of 13％ of the total cost. Therefore, the overall rating of the SIDEMAN Project on the five evaluation criteria is reasonably high.

3-6 Recommendations

【By the end of the Project】

・Economic efficiency coefficient：In order to prove the excellence of the SIDEMAN Project's verified scheme development methodology, it is recommended to estimate the economic efficiency coefficient of each pilot scheme such as B/C or FIRR, and compare it with the efficiency of ordinary scheme development method.

・Revising three guidelines：Revising three guidelines should be done to concretely describe the implementation requirements and processes of the verified irrigation development methodology.

・Documenting：Lessons learnt from the SIDEMAN Project implementation based on the strategy of the three Outputs should be clearly documented and shared with IDD and other concerned stakeholders.

・Developing action plan：Implementation status should be evaluated, and action plan prepared for effective exit from the SIDEMAN Project should be developed.

・Project management：There is a room for improvement in project management although the Outputs have been produced to some extent.

【After the Project】

・Disseminating the SIDEMAN Project methodology：MWI should make efforts and provide necessary measures to disseminate the verified scheme development methodology for other smallholder irrigation scheme development.

・Monitoring the progress：JICA should monitor the progress of disseminating the verified scheme development methodology, and if necessary, will make further technical assistance

・Linking to other JICA project：In order to increase and stabilize the income generation effect of the SIDEMAN Project for the six schemes, DIOs should encourage and support farmers to propose assistance from a JICA project named "SHEP UP" in collaboration with DAOs.

・Monitoring and follow-up：Progress of farmers' constructions of remaining structures has to be monitored and followed up on the six pilot schemes.

3-7 Lessons Learnt

- Preliminary study : Preliminary study shall be precisely conducted especially on infrastructure development to avoid inaccurate cost estimation.
- Farmers' participation : Farmers' participation on irrigation development and management is an effective approach not only increase ownership by farmers but also secures sustainability of the constructed/rehabilitated schemes.
- Monitoring : Project shall have a clear monitoring, evaluation and reporting framework that are shared among involved members of project management.