Terminal Evaluation

Africa

1. Outline of the Project

Country:
Kenya

Project title:
Training Program on Global Positioning System (GPS) Surveying

Issue/Sector:
Mapping

Cooperation scheme:
Third-Country Training Program

Division in charge:
Social Development Cooperation Department

Total cost:

Period of Cooperation Fiscal Year 1998 - 2001

Partner Country's Implementing Organization:
Kenya Institute of Surveying and Mapping (KISM)

Supporting Organization in Japan:

Related Cooperation:
Group training; "Surveying and Mapping 2"
Grant Aid; "Project for Reconstruction of the Kenya Institute of Surveying and Mapping"
Project-type Technical Cooperation; "The Kenya Institute of Surveying and Mapping "

1-1 Background of the Project

It was a serious problem in Kenya that there was a shortage of surveyors and that this delayed introducing the new techniques necessary to acquire the geographical information needed to organize and implement a national development plan. To correct the situation, the Government of Kenya (GOK) requested the Government of Japan (GOJ) to provide Grant Aid and Project-type Technical Cooperation to build a training center that would provide training in the techniques necessary for surveys and related tasks. In response, the GOJ implemented the five-year Project-type Technical Cooperation "The Kenya Institute of Surveying and Mapping" and promoted the establishment of a diploma course and organizing curriculum.

Additionally, although the group training "Surveying and Mapping 2" had been implemented, its capacity was limited and sufficient personnel could not be fostered. Therefore, other East African countries had difficulties implementing national plans such as land surveys and infrastructure development.

Under the circumstances, as a part of South-south Cooperation, the GOK requested the GOJ to provide a Third-country Training Program on the Global Positioning System (GPS) to train the necessary personnel in the field of surveying in the East African countries around Kenya at the Kenya Institute of Surveying and Mapping (KISM), where the foundation for the training was fully established, utilizing the equipment and personnel of KISM.

1-2 Project Overview

The GOJ together with JICA implemented the training to the nominees of governments or individuals engaged in surveying, mapping or related work in Kenya and surrounding East African countries to foster GPS surveyors at KISM and train more personnel in the field of surveying.

(1) Overall Goal

Through the Training, the capacities of the surveyors are upgraded in the participating countries, contributing to the national development of surveying techniques.

(2) Project Purpose

Having acquired the knowledge and techniques of GPS surveying, participants could implement surveys utilizing GPS and apply those techniques to other fields.

(3) Outputs

1) Participants acquire the basic knowledge of GPS surveying.
2) Participants acquire the knowledge and skills of GPS observation.
3) Participants acquire the knowledge and skills of GPS calculation methods.
4) Participants acquire the knowledge and skills of GPS applications.

(4) Inputs

Japanese side:	
Short-term Expert	1/fiscal year
Local Cost	
Kenyan side:	
Counterparts	60

(5) Participant Countries

Botswana, Ethiopia, Lesotho, Malawi, Namibia, Seychelles, Swaziland, Uganda, Tanzania, Zambia, Mauritius and Kenya.

2. Evaluation Team

Members of Evaluation Team	JICA Kenya office (Consigned to the local consultant: Partnership In Management Assistance and Training)	
Period of Evaluation	Mar-2002	**Type of Evaluation:** Terminal Evaluation by Overseas Offices

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The Training was to offer new techniques, GPS surveying, to the African countries. It may take time to fully introduce and utilize the techniques, but the survey implementing organizations of the participating countries have moved ahead in the use of GPS; therefore, the Project is considered to be highly relevant.

(2) Effectiveness

According to the answers to the questionnaire given by the ex-participants (31 out of 60 ex-participants), 94 percent of the respondents highly evaluated the training program giving answers such as "very good" or "good". The ex-participants utilized the know-how acquired in the training at their working places, and 67.7 percent of the respondents mentioned that they utilized the GPS techniques acquired in the Training. For example, surveying practices were implemented by the national land survey network at KAMURI District and PALLISA District of Uganda, and GPS was utilized in surveying village areas, forests, urban areas and borders in Tanzania. Judging from above, the Project Purpose, participants acquire up-to-date techniques in the field of surveying, is accomplished.

(3) Efficiency

Most of the lecturers hold a Master's or Doctor's degree, so they are highly qualified to teach GPS techniques, and many of them indicated that KISM was the appropriate facility for implementing the Training. However, KISM was still using very old receivers in need of repair or replacement. To keep up with the significant advances in hardware, continuous renewal of the equipment is required.

(4) Impact

For Kenya, the Training also has the role of training the instructors, and ex-participants play the role of instructors, teaching GPS techniques to others, and as more and more people contribute to dissemination of GPS techniques, there is a greater contribution to the capacity upgrading of surveyors in the participating countries.

(5) Sustainability

According to the answers to the questionnaire survey to ex-participants and the supervisors of ex-participants, Uganda, Swaziland and Tanzania own GPS equipment and utilize the attained GPS techniques. On the other hand, the participants who are mainly from Kenya do not have GPS equipment in their home organizations, so they have not utilized their acquired knowledge after returning home. Based on the interviews to the principals of KISM, it is not possible to sustain the TCTP program without donor funding because of the exorbitant running costs for the third-country training program.

3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

N/A.

(2) Factors concerning the Implementation Process

N/A.

3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

Some of the participating countries do not have GPS equipment, and the ex-participants can not disseminate the acquired techniques.

(2) Factors concerning the Implementation Process

The lack of software, necessary repair effort and updating of the equipment such as GPS receivers affect the efficiency.

3-4 Conclusion

The Training contributes to promoting surveys utilizing GPS techniques in the participating countries by transferring the necessary GPS techniques to the participants.

3-5 Recommendations

(1) It is necessary to renew the GPS equipment immediately to keep up with technical innovation. For future training programs, adequate funding and updating of equipment are necessary.

(2) GPS equipment and software should be provided to the participating countries.

(3) It is necessary to review the duration of the training. More time is necessary for more on-site practice.

(4) It is necessary to conduct mid-term evaluation for all courses. By evaluating the Training, problems can be detected earlier. It is important to organize a mechanism to cope with the problems.

(5) More follow-ups are necessary to measure the impact of the program as current follow-ups are insufficient.

3-6 Lessons Learned

N/A.

3-7 Follow-up Situation

N/A.