

The Kenya Medical Research Institute (KEMRI) Technical Cooperation Project



Project Sites Nairobi

1. Background of Project

The diseases of diarrhoea, hepatitis and schistosomiasis were the third leading cause of death in Kenya, behind malaria and respiratory diseases, accounting for 10% of all deaths. The Government recognized the importance of a healthy population for national development and put a top priority on preventive medical care. This Project developed and strengthened a research system for controlling infectious diseases, particularly viral diarrhoea, viral hepatitis, bacterial diarrhoea, and schistosomiasis at KEMRI, a biomedical research institute established in 1985 with grant aid from Japan.

2. Project Overview

(1) Period of Cooperation

11 May 1985 – 30 April 1990

(2) Type of Cooperation

Project-type Technical Cooperation

(3) Partner Country's Implementing Organization

Kenya Medical Research Institute (KEMRI)

(4) Narrative Summary

1) Overall Goal

The capability of KEMRI is strengthened to control infectious diseases in Kenya.

2) Project Purpose

Human resources at KEMRI are developed by research activities in model areas.

3) Outputs

- Community-based studies of infectious diseases are promoted.
- A study of rota virus gastroenteritis for infants is promoted.

- A community-based study of hepatitis B is conducted in a rural area.
- Diagnostic reagents for hepatitis B are put to trial.
- Schistosomiasis control in Kware is improved.

4) Inputs

Japanese Side

Long-term experts	28
Short-term experts	29
Trainees received	21
Equipment	683 million yen

Kenyan Side

Counterparts	31
Local cost	

3. Members of Evaluation Team

JICA Kenya Office

(Commissioned to Almaco Management Consultants)

4. Period of Evaluation

7 November 2000 – 25 January 2001

5. Results of Evaluation

(1) Relevance

The Government of Kenya had outlined the strengthening of infectious disease control, preventive medical care, more training opportunities for medical personnel, promotion of community-participation, and strengthening the role of KEMRI in infectious disease control in the National Development Plan and the Ministry of Health (MOH) Development Plan for 1984 – 88. The Project was in line with these Government policies.

(2) Effectiveness

Human resources at KEMRI were successfully developed. A total of 57 Japanese experts were dispatched for training and technology transfer to counterparts, and 31 counterparts were involved in the Project as investigators or administrators, of which 21 were trained in Japan. During the Project period, the counterparts trained a total of 5,000 community people including health officers.

The technology transfer and modern equipment introduction improved the efficiency of research activities and the overall research level at KEMRI.

(3) Efficiency

The Project was carried out on schedule and at the anticipated budgets. Dispatch of experts and acceptance of trainees were also on schedule.

(4) Impact

KEMRI developed a blood screening kit for Hepatitis B (KEP-CELL kit) that was approved by the MOH. Approximately 800,000 kits were ordered for tests country-wide. KEMRI's capability was also strengthened. One of the project's results is the significant reduction in the prevalence of schistosomiasis: the infection rate in Mwachinga and Mtsangatamu decreased from 68% to 37% and 60% to 29% for adults, and from 92% to 45% and 72% to 35% for children, respectively.

(5) Sustainability

Since 1979, government policies have supported KEMRI's activities of research, provision of human resources, and improvement of public health. However, the country's severe financial conditions forced the Government not to allocate sufficient budget to KEMRI, hindering KEMRI's research and the implementation of the infection control measures that were developed in the Project.

The maintenance system of equipment in KEMRI has also been inadequate for sustainability. No detailed records existed, and damaged equipment was found not repaired due to lack of expertise, spare parts or funds. Annual maintenance schedules were also not prepared.

6. Lessons Learned and Recommendations

(1) Lessons Learned

The project agreement must clearly identify and allocate responsibilities to participating parties. Adequate consultations between implementing teams and other interested parties are crucial for effective project planning and implementation. Networks and good relationships should



KEMRI

be established between experts and counterparts in order to realize the project purpose.

(2) Recommendations

For site selection, infection rate should be considered. The Project contributed to a decrease in the infection rate, particularly of schistosomiasis of all ages in model areas. The participation of the community and other concerned people must be promoted for an effective and sustainable project. For appropriate management of the introduced equipment, reinforcement of the maintenance system, including registering is necessary.

7. Follow-up Situation

The Research and Control of Infectious Diseases Project, Phase I was implemented from May 1990 to April 1995 with a one-year follow-up, followed by the Research and Control of Infectious Diseases Project, Phase II from May 1996 to April 2001. The Project for Research and Control of Infectious and Parasitic Diseases is planned from May 2001.

The Horticultural Development Project in Kenya



Project Sites Thika

1. Background of Project

The Government of Kenya has introduced macadamia nuts as a cash crop alternative to tea and coffee since 1964. With little progress after efforts for production improvements, the Government requested Japan to assist in increasing production. In response, the Government of Japan dispatched an expert to Kenya for the quality improvement of macadamia nut strains. The expert confirmed the high potential of macadamia nut production and the project-type technical cooperation "The Horticultural Development Project" was commenced in 1985.

The Project ended up with a one-year extension and two-year follow-up.

2. Project Overview

(1) Period of Cooperation

- 4 December 1985 – 3 December 1990
- 4 December 1990 – 3 December 1991 (extension)
- 4 December 1991 – 3 December 1993 (follow-up)

(2) Type of Cooperation

Project-type Technical Cooperation

(3) Partner Country's Implementing Organization

Kenya Agricultural Research Institute (KARI)

(4) Narrative Summary

1) Overall Goal

Macadamia nut production in Kenya is promoted.

2) Project Purpose

Research activities of the National Horticultural Research Institute are promoted by developing macadamia nut growing technology. Personnel engaged in macadamia nut production are trained.

3) Outputs

- a) Superior strains are selected.
- b) Surveys are carried out and information is extended on 1) macadamia nut growing, 2) pest control, and 3) soil and plant nutrition.
- c) Human resources in macadamia nut production are developed.

4) Inputs

Japanese Side

Long-term experts	11
Trainees received	22
Equipment	210 million yen

Kenyan Side

Counterparts	29
Local cost	

3. Members of Evaluation Team

JICA Kenya Office
(Commissioned to Almaco Management Consultants)

4. Period of Evaluation

15 March 2001 – 31 March 2001

5. Results of Evaluation

(1) Relevance

The 1979/83 Development Plan stipulated that horticultural development and related research and development would receive high priority. The 1984/88 Development Plan focused on development of technologies appropriate to specific agro-ecological zones and for specific crops in the agricultural research policy. Since macadamia nuts are well adapted to the climate in the wide area of

Kenya, they appear promising as a cash crop, but there had been little extension, so the project is considered to be relevant.

(2) Effectiveness

The Project selected the best strains for the project site, and identified the appropriate nature of soil, depth for growing, and nutrition necessary. Technologies for higher yield, such as pruning, were transferred to rural areas through training. Extension activities, and publication of 14 magazines and 3 leaflets were other achievements. Training in Japan and technology transfer by experts enhanced the capabilities of farmers and improved the function of KARI.

Time constraints caused some issues to remain. For instance, relevance between pruning technique and planting density, identification of suitable intercrops, and pest control of fruit trees other than macadamias were not sufficient. Another constraint was of the insufficient duration of short-term experts that caused some survey results to be confirmed after the experts left the country.

(3) Efficiency

The Project was undertaken efficiently within the designed frame of time and budget.

Some issues found regarding the Japanese side included language constraints, delayed dispatch of experts, and insufficient duration of short-term experts.

Issues found regarding the Kenyan side were personnel transfers, low remuneration to researchers, and inadequate budget allocation.

(4) Impact

KARI recognized that the Project contributed to the improvement of production efficiency of macadamia nut and increased the export volume. The export increased from 250 million tons in 1985 when the project commenced, to 810 million tons in 1999. The volume is expected to further increase with expansion of the global macadamia nut market. It is promising as a source of acquiring foreign currency. The project findings are expected to apply to neighboring countries with similar agro-ecological zones including Tanzania, Uganda, and Malawi.

(5) Sustainability

Many activities at KARI have been sustained, albeit at a slow pace, for seven years since the project termination. Sustainability for a longer term will require linkage between the public and private sectors, advanced policy for human resource development, and infra-structural



Seedlings ready for grafting (KARI)

development.

6. Lessons Learned and Recommendations

(1) Lessons Learned

Issues found during the project, such as language constraints by the Japanese, delayed dispatch of experts and insufficient duration of short-term experts were mostly related to the dispatch of experts. When securing them, special attention beforehand is needed.

(2) Recommendations

For the sustainable development of activities in, for instance quality improvement, farm management, soil and nutrition, pests and diseases, it is necessary to reinforce the prompting of the implementing organization's financial self-sufficiency within the project cooperation period.