



## BEEKEEPING DEVELOPMENT PROGRAMMES IN KENYA

by KIREA I. KIGATIIRA

(Beekeeping Section, National Agricultural Laboratories  
Nairobi, Kenya)

(Reprinted from "Apiculture in Tropical Climates",  
IBRA, London 1976, Pages 143-146)

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### The Basis

The beekeeping industry in Kenya is worth many millions of shillings and plays an important part in the economy of arid areas. Beekeeping is a traditional practice, developed and tried for thousands of years, and virtually all honey in Kenya is produced by traditional methods. It was felt that, in order to increase the output of honey in the country, improved beekeeping practices should be tried.

In view of the difficulties in achieving economic development in these areas, Oxfam (through "Freedom from Hunger") granted Kenya in 1967 £8000 over two years for a pilot project, with the hope that a more involved project might then be considered should development prove possible. The object of this pilot project was to gather information and to start any scheme that might be of value in achieving the objects of the project. An application was lodged in 1967, for the continuation of the two-year beekeeping pilot project for a further year, by which time it was thought it would be possible to establish the beekeeping industry on a commercial footing.

At the expiry of the Oxfam exploratory project in 1970, the Kenya Government requested the Canadian Government to provide technical assistance, in the form of apicultural experts to help establish a Bee Section in the Ministry of Agriculture. Also funds for the building of a small laboratory, supply of equipment, and fellowships for overseas training, were requested. The Kenya Government was to provide counterpart personnel and support services.

The basic phase 1 objectives of the Canadian projects were to assist the Kenya Government to establish a permanent Apicultural Section in the Ministry of Agriculture, by means of a co-operative programme of training, extension and research, in particular the following :-

1. To continue the development of primary honey and wax collection centres, and of central refinery and marketing centres, in Kenya. These first efforts were adopted in 1950 by the Animal Industry Section of the Veterinary Department.
2. To undertake general extension and promotion work, through mass media such as radio, pamphlets, and participation in Agricultural Shows.

could be used to advantage, then adapting it to local needs and conditions, and finally - possibly the most difficult task - educating farmers to use it.

1. Extension      Precisely to the above end, the Canadian team maintained posts of technical specialists who brought education and service, in many instances, down to the subsistence farmer. A hive intermediate between traditional hives and movable-frame hives, which was fitted with standardised movable bars, was made available. The hive was simple enough for the farmer to use safely and economically with methods he employs traditionally. Training programmes in many areas were conducted on using the hive in ways which cost little in terms of human effort.

As awareness continued to increase, it became apparent that a significant production increase could be achieved only as the team, which now included reliable Kenyan officers, helped the farmer to improve all major aspects of his operation. He must have help to acquire understanding of (and often be helped to finance) improved hives, and also modern practices in bee culture, management, pest and disease control, and the handling of hive products.

2. Training        In 1972 the first Kenyan left for Canada for eight months' training. At the completion of his course in 1973, the second Kenyan left for Canada to undertake a two-year MSc course in Apiculture. In August 1975 a third Kenyan completed his eight month diploma in Apiculture. These Kenyans have been sponsored under the auspices of the project. There is, however, need to train more Kenyans so that the Section can be manned by fully trained research and extension personnel. Courses on beekeeping are held regularly at Ngong FTC for farmers and extension officers. Trainees taking Animal Husbandry courses at AHITI in Embu and Bukura receive a complete course in all aspects of beekeeping. Most of the Village Polytechnics have a compulsory beekeeping course, and sometimes students receive hives on completion of the course.

3. Research        A small field research laboratory and a bee house were established at Ngong Farmers Training Centre. An apiculture research laboratory has been constructed at the National Agricultural Laboratories, Kabete, and though not yet fully equipped, it is satisfactory for the present stage of our research, and considerable knowledge of bee behaviour has been gained. However, research has been dominated by the extension programme, and achievements have fallen short of hoped-for goals.

Hives, hive accessories, and beekeeping equipment such as swarm catcher boxes, smokers, veil and gloves, have been produced and improved from time to time.

4. Beekeeping Centres      The need was felt for a strong central marketing organisation, with more sophisticated machinery for both honey refining and hive construction, and with the necessary supervision of technical operation. Thika Farmers Training Centre was selected, and machines were installed. This central system was fed with honey from satellite collecting centres in Marimanti (Meru), Kitui, Wamba (Samburu) and Makueni (Machakos), these centres partially cleaned their products and forward them to Thika for

3. To advise on, and to assist in, organisation of local courses of training in beekeeping.
4. To undertake research relevant to Kenyan conditions, and to the requirements of the traditional Kenyan beekeeping industry, in such spheres and activities as improved hives, bee management, honey handling and marketing, use of bees for pollination.
5. To undertake habitat study surveys, to determine characteristics of honey types and honey flows, and to develop vegetation and pollen reference libraries.
6. To select apiculturalists and to train them in Canada, ready to take over the project on behalf of Kenya Government after the completion of the programme.

The project Director, Prof. G. F. Townsend (Canada), was in charge of the overall operation of the project, including the planning and periodic review of the programme of teaching, extension and development, and the general appointment, supervision and co-ordination of the activities of the Canadian team, in consultation with the Head of Animal Production Division of the Ministry of Agriculture (Kenya) and with CIDA.

The appointed Team Leader (Canadian) was always the overall director of the programme on the spot, assisted by a Canadian Extension Officer appointed for four years. The Canadian officers, Kenyan counterparts, and field staff formed a Bee-keeping Team which was ready to fill the many gaps in the ideal of beekeeping, aimed at the positive participation of the public.

An early decision of the team was to respond to the interest expressed by individuals and groups, rather than to sell the programme and its purpose aggressively. It was recognised that the speed of adaption to improved bee management was influenced by the following:-

1. The communicability of the idea, explained in simple general terms that are understood with ease.
2. The relative advantages of the idea, such as easy manipulation, low cost in terms of material investment or of human effort and future benefits.
3. The compatibility of the idea: it was realized that a technology that is contrary to commonly held values, interests and beliefs of the community is not likely to receive the support of the people.
4. Divisibility: complex ideas were divided up into small parts for the purpose of trying them out.

#### Achievements

It was realized that with beekeeping, as with other agricultural inputs, the question in Kenya (and other developing countries) is not one of seeking new knowledge only, but rather one of improving and implementing what exists already. In this country, where food production falls behind needs, the first task called for determining what existing technology

finishing and packing. Thika continues to be the centre for bee supplies for the country.

#### The Future

The Government of Kenya wishes to extend the project into a second phase, 1967-1977 to 1979-8. This will enable the project to consolidate its achievements so far, and will permit a smooth handing over of all the major operations from Canadian to Kenyan management. Already a Kenyan has been appointed Director of the project, with a Canadian (Professor Townsend) as an advisor.