INSTRUCTIONS: Complete by HAND or TYPE
Originator: Retain yellow copy and forward original and pink copy to addressee
Addressee: When replying retain original and return pink copy
NOTE: This set is printed on NO - CARBON - REQUIRED paper

MESSAGE

Please find below some comments concerning the draft project proposal.

Budget
Researched
Agriculturist (instead of agronomist)

Trainee - should be explained role of farmer comes under personnel. They are

Relatively not to be varied by Race. I think they come may be under training programme locally.

Equipment
what are the justifications for three vehicles. It seems too many

on the other side I would include in ten

furniture insurance for fuel, security vehicle

It is very difficult to do obtion from any government.

SPEED MEMO

Addressee: Project Botswana - Agriculture

Subject:  

Division, Room/Project & Country

Date: 5/3/87

REPLY

Development objectives need context.
Objective must be more clearly defined
Some of the details given will fit better under a chapter called activities.

Project outputs are more related to objectives and activities than real output. They might be formulated in a different way.

In development objectives, it is stated that the project will undertake bible teaching. However, they are not clear. These seem all right.

Division, Room/Project & Country

Reference
SUMMARY OF PROJECT PROPOSAL

PROPOSAL NO.: C 3454

TITLE: Development of Apiculture as a Source of Rural Income, with Special Reference to Women

PARTICIPATING COUNTRY: Botswana

GOVERNMENT CO-OPERATING AGENCY: Ministry of Agriculture, Department of Women's Extension and Beekeeping Unit

PROJECT DURATION: Three years

BUDGET ESTIMATES: Financing Government US$ 595,000 ± 10%
Participating Country US$ To be determined

DEVELOPING OBJECTIVES: Cattle production is the main source of rural income in Botswana. However, over 50% of peasant households own no cattle in an agricultural environment where even subsistence production of grains is an uncertain basis for family maintenance. Within this situation in which a large proportion of heads of households of poorer families are women, it is considered an urgent priority by the Ministry of Agriculture to seek the development of any source of rural income. Village beekeeping is one potential source that has been demonstrated workable in three areas of Botswana in recent years. The natural resources for beekeeping are primarily the natural flora and the native bee (apis. m. adansonii) and the simple equipment which can be made even from waste materials. The development objective of this project is to realise this potential with basic instruction by extension and to lay the foundations of processing the low-cost product of the rural household into a marketable commodity.
In addition to the important perspective on integrating women into the rural development process, this project is justified in the context of ensuring that the momentum of progress to date is not allowed to diminish. Pilot projects have demonstrated a simple low-cost technology for beekeeping, within the resources of the poorest Botswana family. There are few potential rural enterprises that offer income with such low demands on land, labour or capital in Botswana. Existing staff establishment and advisory personnel are yet inadequate to ensure that the results of the pilot projects are transformed into a functioning extension programme.

The provision of advisory assistance in extension will fill a role in the administrative system directing the results of pilot projects into an extension programme, using a largely existing cadre of extension personnel.

Several young Botswana staff have recently undergone training, one or two in beekeeping and two in general agriculture for administration of women's extension programmes. This means that by the end of a period of advisory assistance, local staff should be available to take over the responsibilities.

To co-ordinate the experiences that have taken place in three areas of Botswana and develop from them a strategy of beekeeping extension orientated to poorer households with little or no other source of cash income, of which the majority would be headed by women. It is therefore foreseen that this will materialize in the form of a technical assistance adviser attached to the Department of Women's Extension in the Ministry of Agriculture.

Donor Financed Inputs:
- Extension adviser with special reference to beekeeping, consultants, associated experts official travel, supplies and equipment, miscellaneous expenses and fellowships

Local Inputs:
- National staff, local travel and facilities
PROJECT OUTPUTS:

1. A viable extension service for basic village beekeeping with special attention to women-headed households.

2. An established rural extension staff with the competence to advise simple beekeeping technology, as one of several rural enterprises they are responsible for promoting.

3. Identification of target groups of poorer rural families, especially women-headed households for whom beekeeping is one of the few viable potential enterprises under severe resource constraints.

4. Demonstration, by adoption, of the feasibility of the enterprise and its introduction into at least three areas of Botswana countryside.

5. The achievement of cash income by adopting households with the necessary assistance with beekeeping equipment, extension and marketing of honey and beeswax.

6. Recommendations for future organizations of honey and beeswax marketing according to the level of production achieved.

7. Overall strengthening of the role of the Extension for agricultural women programme in Botswana.

BUDGET:

<table>
<thead>
<tr>
<th>Code</th>
<th>Object of Expenditure</th>
<th>Estimated Cost in US$</th>
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<td>Personnel Services</td>
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<tr>
<td>20</td>
<td>Official Duty Travel</td>
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<td>Contractual Services</td>
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<tr>
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<tr>
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<td>Supplies and Material</td>
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<td>Equipment and Furniture</td>
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</tr>
<tr>
<td>80</td>
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</tr>
<tr>
<td>90</td>
<td>Project Servicing Costs 13%</td>
<td>68,000</td>
</tr>
</tbody>
</table>

**TOTAL** 595,000

Counterpart staff: get UNDP office to call maybe small amount of money for transport. X 4062
PROJECT OUTPUTS:

1. A viable extension service for basic village beekeeping with special attention to women-headed households.

2. An established rural extension staff with the competence to advise simple beekeeping technology, as one of several rural enterprises they are responsible for promoting.

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BUDGET:

<table>
<thead>
<tr>
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<th>Object of Expenditure</th>
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<tr>
<td>90</td>
<td>Project Servicing Costs 13%</td>
<td>68,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>595,000</strong></td>
</tr>
</tbody>
</table>

- Counterpart staff needed.
- Get UNDP office to call maybe small amount of money for transport.
- Authorise small amount for travel.
- Equipment not given free.
- Revolving fund some supplies included in training.
- Code that for three times 200-300 US.$
FAO/GOVERNMENT CO-OPERATIVE PROGRAMME

PLAN OF OPERATION

Donor Government:  [Redacted]

Country: Botswana

Project Symbol and Title: Development of Apiculture as a source of rural income with special reference to women

G 3454
PLAN OF OPERATION

1. Within the framework of its agreement with the Government of (the Donor Government) and upon request from the Government of Botswana, the Food and Agriculture Organization of the United Nations (FAO) will supply assistance for the execution of the following project:

   Project Title: Development of Apiculture as a source of rural income with special reference to women

   Estimated Costs (Plan of Expenditure in Appendices I and II):
   - Donor Government Contribution US $ 676,101
   - Counterpart Contribution equivalent US $ 692,848

   Planned Duration: 3 years

   Background and Purpose: Appendix III

   Description and Work Plan (including job description of Project Manager/Team Leader): Appendix IV

   FAO OBLIGATIONS

2. FAO shall be responsible for the recruitment, international travel, salaries and emoluments of the international staff (except volunteers) shown in Appendix I. Appointments of international staff shall be submitted to the Government for clearance. All staff will work under the direction of the project manager who, on behalf of FAO, is responsible for the technical execution of the project.

3. FAO will provide the equipment and supplies shown in Appendix I. The equipment shall remain the property of FAO for the duration of the project. Its ultimate destination shall be decided by FAO in consultation with the Government.

4. FAO may arrange for supervisory travel visits to the project.

5. All FAO's obligations arising under this Plan of Operation shall be subject to (i) the decisions of its governing bodies and to its constitutional, financial and budgetary provisions, and (ii) the receipt of the necessary contribution from the Donor Government. Any obligations assumed by FAO may, at any time, be taken over by the Donor Government.

6. FAO may, in consultation with the Government, execute part or all of the project by sub-contract. The selection of the sub-contractors shall be made, after consultation with the Government, in accordance with FAO's procedures.
PLAN OF OPERATION

1. Within the framework of its agreement with the Government of (the Donor Government) and upon request from the Government of (the Government) the Food and Agriculture Organization of the United Nations (FAO) will supply assistance for the execution of the following project:

   Project Title: Development of Apiculture as a source of rural income with special reference to women

   Estimated Costs (Plan of Expenditure in Appendices I and II):
   - Donor Government Contribution
   - Counterpart Contribution

   Planned Duration: 3 years

   Background and Purpose: Appendix III

   Description and Work Plan (including job description of Project Manager/Team Leader): Appendix IV

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6. FAO may, in consultation with the Government, execute part or all of the project by sub-contract. The selection of the sub-contractors shall be made, after consultation with the Government, in accordance with FAO's procedures.
GOVERNMENT OBLIGATIONS

7. The Government shall take all necessary measures to facilitate the execution of the project and to assist the FAO staff in obtaining such services and facilities as they may require to fulfill their tasks. The Government shall apply to FAO, its property, funds and assets, its officials and to other persons performing services on its behalf, in connection with the project, the provisions of the Convention on Privileges and Immunities of the Specialized Agencies; the UN operational rate of exchange shall be used in currency exchange calculations.

8. The Government shall deal with any claims brought by third parties against FAO, its personnel or other persons performing services on its behalf in connection with the project, except when it is agreed by FAO and the Government that such claims arise from gross negligence or willful misconduct of such persons.

9. The Government shall be responsible for the recruitment, salaries and social security measures of the national staff. The Government shall also provide the facilities and supplies shown in Appendix II, as and when required for the project.

10. The Government shall grant to the staff of FAO and of the Donor Government and to persons acting on their behalf, access to the Project Site and to any material or documentation relating to the Project and shall provide any relevant information to such staff or persons.

11. The Government is responsible for the cost of import and customs clearance of project equipment, its transportation, handling, storage, and related expenses within the country; its safe custody, maintenance, insurance and replacement, if necessary, after delivery to the project site.

REPORTING

12. FAO shall report on the project to the Government and to the Donor as outlined in Appendix 3 (Page 13) attached every six months on the progress of the project.

13. The Government shall agree to the dissemination of information like descriptions of the project and of its objectives and results, for the purpose of educating public opinion.

AMENDMENTS AND TERMINATION

14. This Plan of Operation may be amended or terminated by mutual consent. Termination shall also take effect sixty days after receipt by either party of written notice from the other party. In the event of termination, the obligations already assumed by the Government shall remain in force to the extent necessary to permit orderly withdrawal of the funds and assets of FAO and of personnel performing services on its behalf.

15. This Plan of Operation shall enter into force upon signature by both parties.

For the Government of Botswana

For the Food and Agriculture Organization of the United Nations

Date: ........................................

Date: ........................................
### Budget Covering Donor Contribution

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<th>Code</th>
<th>Personnel</th>
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<th>Year 2</th>
<th>Year 3</th>
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<tr>
<td>60</td>
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<td>60 000</td>
<td>40 000</td>
<td>20 000</td>
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<tr>
<td></td>
<td>1 four-wheel drive pick-up and 1 four-wheel drive car, including spare parts for 3 years</td>
<td>60 000</td>
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<tr>
<td></td>
<td>4 motorbicycles</td>
<td>4 000</td>
<td>2 000</td>
<td>1 000</td>
<td>1 000</td>
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<td>Beekeeping and teaching equipment *</td>
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<td>42 000</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>84 000</strong></td>
<td><strong>21 000</strong></td>
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* See list on page 12
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<tr>
<th>Training</th>
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<tr>
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<td></td>
<td>77 772</td>
<td>29 380</td>
<td>23 302</td>
<td>25 090</td>
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<tr>
<td>TOTAL</td>
<td>676 022</td>
<td>255 380</td>
<td>202 552</td>
<td>218 090</td>
</tr>
</tbody>
</table>

| Special factor 4% pa as of year 2            | 16 826 | - | 8 102 | 8 724 |
| GRAND TOTAL                                  | 692 848 | 255 380 | 210 654 | 226 814 |
GOVERNMENT OF BOTSWANA CONTRIBUTION AND SUPPORTING ARRANGEMENTS

1. Coordination

The project will be coordinated within the Beekeeping Unit of the Department of Crop Protection of the Ministry of Agriculture.

2. Existing Staff

The Government will continue to support the seven existing staff of the Beekeeping Unit, and continue with its planned programme of training of the four trainees currently working in the unit.

3. Additional Trainees

During each year of the project, two holders of school leaving certificates who have also had one year of rural experience will be made available to the project.

4. Office Space and Secretarial Facilities

The Government will continue to provide office space for the Beekeeping Unit at Gaborone and at Rural Training Centres, and secretarial and book-keeping facilities as required.

5. Storage and Workshop Space

The Government will provide storage space for hives and other equipment. In addition, room will be made available for the storage and processing of honey and beeswax.

6. Transport

The Government will provide drivers, fuel and servicing for all vehicles of the Beekeeping Unit.

7. Land for Apiaries

The Government will continue to provide land for demonstration apiaries at Rural Training Centres.

8. Liaison with the Women's Affairs Unit (Ministry of Labour and Home Affairs)

The Government will encourage liaison between the Women's Affairs Unit and the Beekeeping Unit, and facilitate joint enterprises where possible.
1 BACKGROUND AND JUSTIFICATION

1.1 Beekeeping as an appropriate activity for rural people in Botswana

Ninety percent of Botswana's 1.11m population live in rural areas where the main source of income is from cattle production. However, forty percent of rural households do not own cattle, and depend upon other subsistence activities. Currently eighty percent of food on sale in Botswana is imported. Because of this situation, the Government has stated in its VI National Development Plan (1985-1991) that major objectives are to create income-generating activities for rural farmers, and to promote food self-sufficiency for the country, in addition to sustaining resources for future generations.

Beekeeping is a low-technology activity which conforms well with the requirement of the Development Plan: beekeeping can be carried out by even the poorest rural people, living in remote areas, to give products (honey and beeswax) that are in demand in Botswana.

The trees and bushes of the savanna covering most of Botswana support high populations of wild honeybee colonies, and ample forage for bees is found even in the dry Kalahari area. There is a strong tradition of highly-skilled "honey-hunting", i.e. robbing wild colonies of their honey.

Modern beekeeping has already been proved viable in Botswana using low-technology 'Tanzania' hives to produce good yields of honey and beeswax with minimal equipment. Honey is a popular food, but the market is currently met by honey imported from South Africa and sold at a high price (equivalent to US$8 /kg): locally-produced honey will be able to compete favourably in this market. Beeswax is used in a variety of traditional crafts and modern industry, but currently beeswax is imported for these purposes.

Hive beekeeping was first introduced to Botswana in 1976 and promoted by various NGO projects between 1976 and 1980, when the Beekeeping Unit was established within the Ministry of Agriculture. Rural people show a keen interest in beekeeping, but severe shortage of trained personnel and resources limit the effectiveness of the Beekeeping Unit. Between 1980 and 1983 useful progress was made with the publication of extension material and the establishment of pilot apiaries. However, lack of personnel since 1983 has resulted in little further progress, although two young staff are currently receiving training in Tanzania.
1.2 Beekeeping as a particularly appropriate activity for rural women

Beekeeping can be a home-based activity which fits in well with women's other work. Thirty percent of rural households in Botswana are headed by single women, and in the majority of remaining households the men are often absentee partners working in mining or in urban centres. It is therefore important to ensure that extension services do not exclude rural women, and indeed special efforts must be made to ensure that extension messages are reaching women. A UN mission in 1985 suggested beekeeping as an appropriate activity for rural women in Botswana.

2. OBJECTIVES OF THE PROJECT

The development objective of the proposed project is to provide rural people with the knowledge and means to gain an income from beekeeping. The project will seek to reach people in target rural areas, including those who do not own land, and ensuring that women are included.

2.1 Development Objectives

1. To provide rural people with the knowledge and means to gain an income from beekeeping. The project will seek to reach people in target rural areas, including those who do not own land, and ensuring that women are included.

2. To add to the diversity and nutritional status of the diets of rural people by increasing the availability of honey: a nutritious, high carbohydrate food.

3. To satisfy the requirements for honey and beeswax within Botswana and thereby remove the necessity for importation of both of these products.

4. To stimulate local manufacture of the equipment and protective clothing required for beekeeping.

2.2 Immediate Objectives

1. To strengthen considerably the resources of the existing Beekeeping Unit.

2. To organize and train staff of the Beekeeping Unit so that by the end of the period of advisory assistance, local staff at all necessary levels will be available to manage the Beekeeping Unit and operate a functioning extension service.

3. To prove the viability of successful beekeeping in selected target areas.
4. To teach rural people the simple management of honeybee colonies in low technology hives.

3. PROJECT OUTPUTS

1. A new opportunity for poor, rural people, especially women, to generate income.

2. An organized Beekeeping Unit with the trained staff and physical resources to run an effective extension service.

3. Working demonstration apiaries at four Rural Training Centres, and the introduction of beekeeping into surrounding areas by competent extension staff with defined roles and objectives.

4. Establishment of a revolving credit fund adapted towards the needs of rural women who wish to start beekeeping.

5. Increased self-sufficiency for Botswana in the production of honey and beeswax.

6. Useful liaison between the Women's Affairs Unit, other Non-Government Organisations, and the Beekeeping Unit: this should lead to further strengthening of agricultural extension directed towards women.

7. Stimulation of related activities i.e. manufacture of beekeeping equipment and clothing, marketing of honey and beeswax.

4. DESCRIPTION OF PROJECT ACTIVITIES AND WORKPLAN

4.1 Activities

The initial task of the project will be to commission the manufacture of hives and equipment for the apiaries and for the distribution, and to build up a stock of honeybee colonies. Colonies, can be obtained by collection from the wild, by using bait hives, and by queen rearing. Rural people will be taught simple management of honeybee colonies in low-technology hives: they will be shown how to construct hives themselves, but also given the option of obtaining a ready-made hive under a system of revolving credit. It is likely that beginner beekeepers will prefer to start with a ready-made hive but will subsequently make their own. Equipment for honey and
beeswax harvesting and processing will be shared amongst the target groups; this will serve a valuable purpose in building a 'beekeeping community'. The project will administer the revolving fund for distribution of hives, equipment, and colonies. Provision has been made for a short-term consultant to determine the operating procedure and arrange loan facilities and administration of this revolving fund. Repayments in good quality honey and/or beeswax should be accepted in lieu of money. At first the project will supervise the marketing of honey, demonstrating to beekeepers the importance of quality control and correct handling and packaging. Subsequently containers and labels will be made available, although it may be necessary for the Beekeeping Unit to continue organizing marketing for beekeepers living in remote areas. The project will assist in the marketing of beeswax. The marketing aspect calls for cooperation between the Beekeeping Unit and the Women's Affairs Unit.

4.2 Workplan

Year 1

1. Commission the manufacture of a stock of Tanzania hives and additional top-bars (for use in home-made hives) and arrange for the manufacture of protective clothing (liaise with the Women's Affairs Unit).

2. Build up stocks of honeybee colonies, initially at the Beekeeping Unit apiary, and subsequently at the demonstration apiaries.

3. Select two Rural Training Centres (probably Gabarone and Francistown), and establish demonstration apiaries, initially using the prototype equipment.

4. Identify target groups within the area of Rural Training Centres for promotion of beekeeping. By liaison with the Women's Affairs Unit and relevant NGO's, contact women who may be interested in beekeeping.

5. Second staff of the Beekeeping Unit to the Rural Training Centres, and begin extension work. Staff must have a clear work programme with defined goals. Ensure that any courses of instruction on beekeeping are arranged at times convenient for women.

6. Begin distribution of some 200 hives, free of charge, to rural people in the target areas. At least 50% of recipients must be women. Each family may receive one hive only; thereafter all equipment must be paid for under revolving credit.
7. Establish a revolving credit fund to enable rural people to obtain equipment for beekeeping. Ensure that rural women are aware of this facility, and that it fits their particular requirements.

8. Assist with all aspects of honey and beewax harvesting and processing. Demonstrate the importance of quality control, provide receptacles and labels for packaging.

9. Organize marketing of honey and beeswax as necessary.

10. Organize a programme of staff training, with the objective of forming a viable Beekeeping Unit with staff at all necessary levels by the end of the period of assistance.

Year 2

1. Develop a third demonstration apiary at a third Rural Training Centre.

2. Continue with extension work as described above.

Year 3

1. Develop a fourth demonstration apiary at a fourth Rural Training Centre.

2. Continue with extension work as described above.

3. Prepare for the continued smooth running of the Beekeeping Unit after the end of the period of assistance.
### Beekeeping and Teaching Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Cost (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanzania top-bar hives and spare top-bars (manufactured in Botswana)</td>
<td>400</td>
<td>10,000</td>
</tr>
<tr>
<td>Honey processing equipment: tanks, strainers, sieves, funnels, drums, plastic buckets</td>
<td>4 sets</td>
<td>8,000</td>
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<td>Weighing equipment</td>
<td>4</td>
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</tr>
<tr>
<td>Packaging materials (labels, containers)</td>
<td>4</td>
<td>3,000</td>
</tr>
<tr>
<td>Refractometers</td>
<td>4</td>
<td>500</td>
</tr>
<tr>
<td>Thermometers</td>
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<td>200</td>
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<tr>
<td>Queen rearing equipment</td>
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<tr>
<td>Library</td>
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</tr>
<tr>
<td>Anti-theft devices (chains, padlocks)</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td><strong>For use as prototypes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar wax extractors</td>
<td>4</td>
<td>500</td>
</tr>
<tr>
<td>Protective clothing: veils, gloves, overalls</td>
<td>20 sets</td>
<td>3,000</td>
</tr>
<tr>
<td>Smokers</td>
<td>20</td>
<td>1,000</td>
</tr>
<tr>
<td>Bee brushes</td>
<td>20</td>
<td>300</td>
</tr>
<tr>
<td>Hive tools</td>
<td>20</td>
<td>300</td>
</tr>
<tr>
<td>Honey press</td>
<td>1</td>
<td>700</td>
</tr>
<tr>
<td>Miscellaneous</td>
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</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td></td>
<td>42,000</td>
</tr>
</tbody>
</table>
5. **INSTITUTIONAL FRAMEWORK**

   The project will be coordinated within the Beekeeping Unit of the Crop Protection Department of the Ministry of Agriculture.

6. **REPORTS**

   **Six monthly progress reports**

   Progress reports will be prepared every six months by the Apiculturist (project leader) for transmission by FAO to both the recipient and financing governments. The reports will describe the scheduled activities and provide data on which progress towards the immediate objectives of the project may be evaluated.

   **Terminal report**

   Towards the end of the project the Apiculturist (project leader) will draft the project Terminal Report which will be sent to FAO Headquarters four months before the end of the project for review, finalization and submission by FAO to both the recipient and financing governments at the conclusion of the project. The Report will assess in a concise manner the extent to which the project's scheduled activities have been carried out, its output produced its immediate objectives achieved and its results utilized towards the realization of the related development objectives, and it will present recommendations for any future work arising out of the project.

7. **REVIEW AND EVALUATION**

   1. A tripartite review will be carried out at the end of the first year to assess the progress of the project and suggest any necessary amendments to the workplan and budget.

   2. A tripartite evaluation will be carried out during the second half of the third year of the project to assess the progress of the project towards its objectives and any requirement for follow-up activities.

   Organization of these reviews is the responsibility of FAO.
8. TERMS OF REFERENCE

8.1 Apiculturalist Beekeeper

The expatriate beekeeper must have the following experience:

1. Proven practical beekeeping ability with, ideally previous experience of beekeeping in a developing country. The ability to handle bees well, and teach others a non-aggressive approach to beekeeping.

2. A thorough understanding of the type of beekeeping appropriate for Botswana.

3. Interest in promoting beekeeping as an appropriate activity for rural women.

4. Knowledge of extension work and/or teaching.

5. Since beekeeping is best promoted by demonstration, it would be useful if the person appointed to the post is female.

8.2 Credit Consultant

The credit consultant will complete the following tasks:

1. Design a revolving credit fund to enable rural people to obtain beekeeping equipment, ensuring that the system is appropriate for rural women. Devise a system that allows repayments to be made in good quality honey and/or bees-wax in lieu of money.

2. Arrange financial facilities with a co-operating institute.

3. Train Beekeeping Unit personnel in all aspects of the revolving fund operation, so that they can fully assist rural people, and monitor the use made of loan money.

8.3 Short-term Consultants

The short-term experts should be specialists in certain fields of beekeeping, for example; bee management, honey cropping and marketing, and botany.

The project will be considerably strengthened if it is possible to engage 2 associate experts, one for apiary management and one for extension and training work. The duration should be 2 - 2 1/2 years.
Consultancy on Apiculture

Country: Botswana
Project: Preparation of Project Proposal "Development of Apiculture as a Source of Rural Income with Special Reference to Women"
Duty Station: 2 days' briefing at HQ's + 3 weeks in Gaborone + 1 week at HQ's
Funding: 50% ESHW + 50% AGS R.P.
Backstopping: ESHW and AGSI

Terms of Reference

The International Consultant (preferably a woman) with the cooperation of the beekeeping Officer of the Ministry of Agriculture and the locally recruited socio-economic consultant (women related problems) will perform the following activities:

1. Review the present beekeeping situation in the country.
2. Assess melliferous vegetation for beekeeping development.
3. Review existing programmes for dissemination of apiculture practices.
4. Study the possibility to create a credit for beekeeping equipment and other inputs distribution.
5. Evaluate training and extension needs which will include also women participation.
6. Prepare a detailed project proposal for international donor financing, based on the attached summary of Project Proposal.
7. Prepare an end-of-assignment report which will include:
   - Activities conducted;
   - Findings;
   - Recommendations for follow-up activities;
   - Itinerary and persons met.
BEEKEEPING AS AN APPROPRIATE ACTIVITY FOR RURAL WOMEN IN BOTSWANA

Beekeeping can be considered a truly appropriate form of agriculture for rural women for the following reasons:

1. The requirements for beekeeping are bee-hives, bees, and protective clothing.

   A financial input is not necessarily required to obtain these things.

   **Hives**  Methods of making 'home-made' hives have already been developed in Botswana (information from Beekeeping Unit). If a ready made hive is required, this will (after commencement of the FAO Beekeeping project) be available from the Beekeeping Unit under a system of revolving funds.

   **Bees**  Bees are obtained from the wild or by dividing another colony of bees.

   **Protective Clothing**  Some Beekeepers in Botswana do not use protective clothing, because the bees are very docile. Protective clothing can give the beginner beekeeper confidence in handling bees. Protective clothing (veil, gloves, overalls) will be available under a revolving fund from the Beekeeping Unit as described for hives.

2. Beekeeping is an activity which can be carried out near to home, and can fit in well with women's other work. Bees do not need to be attended to every day, or even every week. It is something that a woman can do when she has time available. If the woman has sufficient time and interest, then she can multiply her number of bee colonies, and thereby obtain greater harvests of honey and beeswax.

3. The products of beekeeping are honey, beeswax, and ensured pollination of nearby crops.

   **Honey**  is a high carbohydrate food, valued by Botswana; it is currently in strong demand on the local market.

   **Beeswax**  is a valuable product, used in Botswana for tie and dye techniques, and for cosmetics. There is currently a world-shortage of beeswax: most beeswax on the world-market is provided by other tropical African countries. Beeswax does not require sophisticated packaging and does not deteriorate with age.

   **Pollination:** It is often not appreciated fully that pollination by honeybees improves the quality and yield of many crops.

4. Harvesting and processing of honey and beeswax involve simple straining and filtering techniques, melting (in the case of beeswax), and packaging for sale. These techniques are quite straightforward for Botswana women.

5. Beekeeping does not compete with other forms of agriculture. The resources required by beekeeping are:

   **Nectar and Pollen**  Bees gather nectar and pollen from flowers and use these to make honey and beeswax. Nectar and pollen are not used by any other form of agriculture, and otherwise would be wasted in the flowers.

   **Land**  Beekeeping does not need to use valuable land. Hives can be suspended from trees, or placed on stands in any piece of waste land. Hives can also be placed on flat roofs of buildings.

   **Water**  Bees require a source of water.
Proposed Co-operation between the Women Affairs Unit and the Beekeeping Unit

FAO is proposing to fund the following project, initially for a three year period:

"Development of Apiculture as a Source of rural Income, with Special Reference to Women"

Beekeeping is being promoted by FAO because it is an activity that can be carried out by people living at subsistence level, and in particular, beekeeping and its products fit in well with other home-based activities carried out by women.

To ensure that the resources made available by FAO reach women living in rural areas, it would be useful to arrange co-operation between the Women's Affairs Unit (Ministry of Home Affairs) and the Beekeeping Unit (Ministry of Agriculture).

The first objective of the FAO project is to strengthen the extension work of the Beekeeping Unit by:

(i) Increasing manpower available for extension work;
(ii) Increasing available resources for extension;
(iii) Providing finance for a system of revolving credit to facilitate purchase of hives and equipment.

During the three years of the project the work will be concentrated in up to four selected areas of Botswana.

The Women's Affairs Unit could play a most useful role by the following means:

(i) By including Beekeeping as one of the activities promoted by the Women's Affairs Unit and by ensuring that extension messages provided by the Beekeeping Unit are reaching women. The Beekeeping unit will provide as required.
(ii) By ensuring that women understand the credit facilities available to them from the Beekeeping Unit (other Government funding schemes e.g. Small Project Fund may also be applicable to Beekeeping).

In addition there are a number of other ways in which the two units could cooperate, for example:

(i) Protective Clothing

The Beekeeping Unit will be seeking manufacture of protective clothing, since sewing is one of the activities already studied by the Women's Unit, there may be scope for women's groups to produce the veils, gloves, and overalls required by Beekeepers.

(i) look at feasibility of project
2) look at unit
(ii) Processing of Honey and Beewax

The Women's Unit may care to organize co-operative processing, which involves filtering, straining, bottling, rendering of beeswax etc.

(iii) Further Processing

Honey and beeswax can be used in a number of home-based industries such as batik and cosmetic manufacture.

(iv) Packaging of Honey for sale

Another possibility for women's involvement is in the preparation of small pots for packaging honey. Elsewhere in Africa, honey presented for sale in this way is attractive to the tourist market.

Women and Development in Botswana

A Government department with the title Women's Affairs Unit was established in 1981 (within the ministry of Home Affairs) with the following objectives:

1. To coordinate women's activities in Botswana at local, national and international levels.

2. To disseminate information

3. To conduct research on the overall situation of women in Botswana.

4. To liaise with different Government Departments on issues relating to women, and advise them accordingly.

Coordinator & Ass't Coord of Women's Affairs

Ms. Mookodi and Ms. Alexander have visited the Kibwezi Beekeeping cooperative in Kenya, which has been run by women since 1980 and is enjoying financial success.
Fiona Bettes
Women extension unit in Agriculture
- get more push if ext. unit in Agric.
Fiona Bettes - under Director of Field Services.
Women's extension officer for Agric.
<table>
<thead>
<tr>
<th>Date</th>
<th>Certifications</th>
</tr>
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<tbody>
<tr>
<td>June 87</td>
<td>KP + 2 CERTIFICATES (KN + BD) + 1 TECHNICAL ASSISTANT (AN)</td>
</tr>
<tr>
<td>June 88</td>
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<tr>
<td>June 89</td>
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<tr>
<td>June 90</td>
<td>KP + 4 CERTIFICATES + 2 DIPLOMA (JM + AN)</td>
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KN = Kooreng Ngakane
BD = Boatumtse Dinjeku
JM = James Mhotshiwa
VM = Victoria Morapedi
LK = Lucas Kgosiemang
2 Trainees return from Tanzania (Certificate) KN, BD

2 Trainees go to Tanzania (Certificate) VM, LK

1 Technical Assistant to Tanzania (Diploma) JM

1 Technical Assistant to Tanzania (Diploma) AN

Year 1  1987/88  88/89
Year 2  89/90
Year 3  90/91

Existing Programme

Additional proposed staff
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<td><strong>End of July 1987</strong></td>
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<td></td>
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<tr>
<td>1 Diploma holder (KP)</td>
<td>1 Diploma holder</td>
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<tr>
<td>21 Technical Assistants (AN)</td>
<td>4 Trainees</td>
<td>8 Trainees</td>
<td>12 Training outside</td>
<td>1 Diploma (AN)</td>
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<td><strong>Training outside Botswana</strong></td>
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<td>2 Certificates (VM, LG)</td>
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<td><strong>Total</strong></td>
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