

PA- ABD-735

FOOD OILS IN AFRICA

DIRECTORY

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INTRODUCTION

Welcome to this first edition of the *Food Oils in Africa Directory*, which includes a listing of agencies and individuals involved with small-scale processing of food oils in Africa. The purpose of the directory is to encourage communications among people who are working to create viable rural enterprises in this important area of the food cycle. It is one part of a larger Food Oils in Africa Program that seeks to help non-governmental organizations (NGOs) and other grassroots agencies improve their project planning and implementation.

The Food Oils in Africa Program is sponsored by Private Agencies Collaborating Together (PACT), an international consortium of NGOs working in development. PACT views its role as one of facilitation -- taking the initiative in launching this program, gathering financial resources, and providing the framework. The program began in 1988 for a scheduled three-year period after which network participants will decide on future directions.

Other Food Oils in Africa Program activities include:

- The *Food Oils Press Newsletter*, an occasional bulletin on technologies, projects, and resources for small-scale oils processing.
- A series of case studies carried out by the implementing agencies themselves, which examine their recent experiences in oils processing.
- Field staff exchange visits, training programs, and other mutual learning events that will be determined by those who are in the network.

- Publication of manuals and other documentation concerning technical resources and organizational issues in small-scale oils processing.
- Regional workshops for practitioners and a conference to present findings and discuss policy considerations in support of agriculturally based food-processing enterprises.

The directory is far from complete. In fact, this first edition is meant as an open invitation to all concerned with food processing in Africa to participate in the program: researchers, appropriate technologists, equipment manufacturers, small enterprise advisors, village development workers, policymakers, donor representatives, and others. The central hypothesis of the Food Oils in Africa Program is that we can most effectively assist small-scale oils processors by working together across language, geographic, and institutional boundaries.

The data presented in this directory was compiled from questionnaires in which people described their efforts and problems. While we, the editors, take responsibility for any errors in interpreting information from the questionnaires, we cannot vouch for the accuracy of the data, some of which was submitted over a year ago. Undoubtedly projects have progressed and personnel have changed. The best way to get updated information is to write to the agency concerned. Our hope is that this directory will facilitate direct linkages among those working on similar issues across Africa.

A note to all those agencies who are already part of the Food Oils in Africa network and have so kindly contributed data: Thank you and let's do it again. Please look over your entry and send us an update on your

activities no later than December 1989. All other interested parties are welcome to participate simply by filling out the questionnaire in the Appendix. The directory is presented in a three-ring binder, so that we can send you additional entries as new agencies join the network. Everyone who receives this directory is invited to let us know what features would make future editions more useful.

A French version of the directory is available. Either version will be sent free of charge to African addresses. Outside Africa, copies of the directory can be purchased at cost for U.S. \$10.00, using the order form in the Appendix.

For more information on the Food Oils in Africa Program, please write to us at PACT.

The Editors,
Ellen LeCompte
Jonathan Otto
Carolyn Stremlau

HOW TO USE THE DIRECTORY

To be of real use, a directory must allow the reader to identify names and addresses of those she or he wants to locate, and to do so quickly. For this reason, we have organized the *Food Oils in Africa Directory* in the following way:

1. Entries are listed in alphabetical order by the name of the agency or individual who submitted the information.
2. Entries are indexed according to a series of descriptive elements:

COOPERATIVES
COUNTRY
CROP DEVELOPMENT
DATA BANK
OILS
PUBLICATIONS
RESEARCH
SOAP MAKING
TECHNOLOGY LEVEL

By checking one or more indices, you can discover, for example, who in the directory is working on soya (just look up *soya* in the Oil index), or where crop development work is being carried out on sesame (cross-reference the Crop Development index and sesame in the Oil index to find Catholic Relief Services in Gambia).

Please remember that the data in the directory was gleaned from questionnaires submitted by the agencies involved. Some questionnaire responses were much less detailed than others with the result that the indices are uneven in some aspects, and certain agencies and projects may be incompletely represented. We recommend contacting agencies directly for current information on their activities.

Of course, since this is the first edition of the directory, there are gaps in what you might hope to find. The directory has no listings from Zaire or a number of other countries, for example, and not nearly enough information on sources of publications and other technical resources. We hope to gather data on many more agencies and individuals by the next edition in order to provide a more complete picture of activities and resources for improving the small-scale processing of food oils in Africa.

NIGERIA

**Adamu Data
P.O. Box 78
Auchi, Bendel State, Nigeria**

ATTN: Dr. Omokhogie Adamu, Director

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ADAMU DATA:**

- OBJECTIVES OF PROJECT:** To compile, organize, and disseminate information on Nigerian agriculture.
- LOCATION OF PROJECT:** Ughiekha, near Augchi, Etsako Local Government Area, Bendel State, Nigeria
- STAGE OF PROJECT:** Data bank for Nigerian agriculture is being developed and maintained. Radio broadcasts on agricultural issues are being aired. Publication and translation of data into local languages remains to be done.
- DIFFICULTIES ENCOUNTERED:** It is hard to obtain timely and reliable information.

ADAMU DATA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** technical language used by other projects; training needs.
- Organization for Production:** categorization of production roles by gender.
- Technologies of Processing:** manual vs. power installations; safety issues.
- Marketing & Economic Issues:** identification of local and export markets. Quality of product and end-user satisfaction.
- Community or Beneficiary Involvement:** effect of intervention on urban migration from rural areas.
- Impact of Government Policies:** ways government policy can be used to encourage agricultural production and the establishment of back-up facilities.

ASSISTANCE ADAMU DATA CAN PROVIDE TO OTHERS:

Will share information it has gathered on agricultural production issues. Assist other organizations in implementing their programs by helping to identify potential locations and by offering advice on build-up activities, administration, and progress monitoring. May be able to provide land resources for development of pilot projects or demonstration units.

MALI

AFOTEC
Villa 8297
Dakar, Senegal

ATTN: Rokiatou Tall

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY AFOTEC:

OBJECTIVES OF PROJECT: To develop and disseminate processing equipment that can be fabricated by local toolmakers and used by women.

LOCATION OF PROJECT: Mali

TYPE OF OIL BEING PROCESSED: Shea

TECHNOLOGY BEING USED: Spindle press. Other manual tools

STAGE OF PROJECT: Prototype processing equipment developed; still need more testing, then training for fabrication and organization of user groups.

DIFFICULTIES ENCOUNTERED: Securing enough funds to complete equipment fabricators' workshops and their training is a problem.

AFOTEC IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation in order to reinforce AFOTEC's capacities for working with women on technologies appropriate for women. Also interested in oil from Balanites, or "wild date," which was traditionally processed in the Sahel.

ASSISTANCE AFOTEC CAN PROVIDE TO OTHERS:

Has broad experience in village-level technologies that are accessible to women and has specialized in training grassroots groups to plan and manage their own projects.

NIGERIA

**Agricultural Extension Research Liaison Service (AERLS)
Ahmadu Bello University
Private Mail Bag #1069
Zaria, Kaduna State, Nigeria**

ATTN: Mrs. V. B. Dunmade

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
AERLS:**

- OBJECTIVES OF PROJECT:** To establish an oil-processing cottage industry run by women's groups, using locally available oil producing seeds and locally manufactured technology in order to create employment opportunities and increase income in rural villages.
- COLLABORATING AGENCIES:** The program is a combined effort of the Home Economists and Engineers of AERLS, the Biochemistry Department of Ahmadu Bello University, and the Chossu State Home Economics Extension staff.
- LOCATION OF PROJECT:** Zaria, Nigeria
- TYPE OF OIL TO BE PROCESSED:** Sunflower, soya, maize
- TECHNOLOGY TO BE USED:** Locally produced equipment
- STAGE OF PROJECT:** The design of the project is completed. The following work will begin as soon as funding is released: Basic tools and equipment for the production and processing of vegetable oil crops will be identified. Village blacksmiths will be organized into cooperatives and trained in the manufacture of the identified tools and equipment. Women's cooperatives will be organized to process the food oil. All participants in the program will be trained in the use and maintenance of the equipment.

AERLS IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways project components have affected the expected outcomes of other programs and ways of monitoring the project until it is fully established.
- Organization for Production:** people who decided what methods would be used for production in the other programs.
- Technologies of Processing:** simple, low-cost technologies.
- Marketing & Economic Issues:** ways to introduce improved technology without threatening the economic viability of local manufacturers who produce the equipment that is being replaced.
- Community or Beneficiary Involvement:** methods of insuring the self-sustainability of the project.
- Role of Women:** effect of intervention on women's roles in the family.
- Impact of Government Policies:** ways to coordinate with government in order to avoid duplication or conflict.

ASSISTANCE AERLS CAN PROVIDE TO OTHERS:

Will help others plan and assess their oil projects.

GHANA

AMP Oil Mills
P.O. Box 14251
Accra, Ghana

ATTN: P. J. Kramer

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY AMP OIL MILLS

- OBJECTIVES OF PROJECT:** To run two cottage industry mills that process palm and palm kernel oils for local farmers and traders on a commission basis.
- LOCATION OF PROJECT:** Kuri and Kade, Eastern Region, Ghana
- TYPE OF OIL BEING PROCESSED:** Palm, palm kernel
- TECHNOLOGY BEING USED:** Palm fruit: electric motorized boiling digester and manual hydraulic press
Palm kernel: traditional methods
- STAGE OF PROJECT:** Processing facilities are available to local producers for 7.5% of the value of the palm oil recovered. Plants run at 30% capacity during the lean season and 85% capacity during the main season.
- DIFFICULTIES ENCOUNTERED:** The palm kernel oil is black and its quality poor. Research and development needs to be done to find or design a small-scale hydraulic or screw press capable of producing a better quality palm kernel oil.

AMP OIL MILLS IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Comparison of AMP Oil Mills experiences with those of others.

ASSISTANCE AMP OIL MILLS CAN PROVIDE TO OTHERS:

Has designed and manufactured the equipment for a complete 12 ton/day palm oil extraction plant as well as equipment for small-scale cottage industry plants. Can assist in solving any technical problems with processing oils.

CAMEROON

Appropriate Technology International (ATI)
1331 H Street, N.W.
Suite 1200
Washington, D.C. 20005, United States

ATTN: Eric Hyman

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ATI/CAMEROON:**

OBJECTIVES OF PROJECT: To develop and introduce new technologies for processing palm oil in order to increase rural incomes, reduce labor drudgery, and reduce the price by increasing the supply of palm oil to consumers.

COLLABORATING AGENCY: APICA/Cameroon

LOCATION OF PROJECT: Cameroon

CONTACT PERSON: Edward Perry

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Manual and motorized models of the Colin press
Manual and motorized models of the horizontal axis Caltech press
Manual models of the vertical axis Caltech press

STAGE OF PROJECT: ATI has established a quasi-private-sector business to design, produce, sell, and service Colin and Caltech oil presses.
Progress has been made in establishing smallholder plantations of improved palm varieties around Otele, Cameroon.

DIFFICULTIES ENCOUNTERED:

The project's impact on oil production and labor productivity is less striking than expected because most commercial palm oil producers were already using the Colin press rather than traditional extraction methods and because the cost of the press places it out of reach for most of those producers who are presently using traditional methods.

The recent introduction of the less expensive vertical axis Caltech will make the technology more available to low income producers.

ASSISTANCE ATI/CAMEROON CAN PROVIDE TO OTHERS:

Written in-depth studies on palm oil technologies. Information is available to any interested parties. Manuals for users and manufacturers planned.

TANZANIA

Appropriate Technology International (ATI)
1331 H Street, N.W.
Suite 1200
Washington, D.C. 20005, United States

ATTN: Fred Swartzendruber

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ATI/TANZANIA:**

OBJECTIVES OF PROJECT: To create employment opportunities for, and increase incomes of, farmers by establishing in rural villages small-scale sunflower oil extraction units using manual sunflower seed oil presses.

COLLABORATING AGENCIES: *Evangelical Lutheran Church of Tanzania
*CAMARTEC

*See separate entry.

LOCATION OF PROJECT: Arusha, Tanzania

CONTACT PERSON: Lynn Schlueter

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Bielenberg ram press
IPI batch manual presses

STAGE OF PROJECT: Thirty oil processing units have been established in 23 villages with approximately 20,000 liters of oil produced during the last year. Improved sunflower seed being tested.

DIFFICULTIES ENCOUNTERED: Initial assumptions about availability of seed proved optimistic and much agricultural extension work has had to be carried out. The market for oil in rural areas had not been examined. Also problems with presses arose in early stages of project.

ATI/TANZANIA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** methods for building the role of agricultural extension workers into program design; dealing with concerns of scale and viability of commercial production.
- Organization for Production:** ways to work with existing entrepreneurs in urban areas; ways to set-up rural manufacturing facilities.
- Technologies of Processing:** trade-offs in actual applications between different technologies in terms of cost, scale, complexity, output, and poor reliability.
- Marketing & Economic Issues:** identification of marketing channels for commercial production. Accurate and timely data on world oil prices.
- Community or Beneficiary Involvement:** type of unit suited to group ownership vs. individual enterprise.
- Role of Women:** potential role of women in manual production systems.
- Impact of Government Policies:** effect of producer prices, agricultural marketing board, and pricing of staple commodities on oil production.

ASSISTANCE ATI/TANZANIA CAN PROVIDE TO OTHERS:

Could be involved in funding under certain conditions, but this would have to be considered on a case-by-case basis. Might be able to provide consulting services on palm and sunflower oil. Regularly publishes information on oil processing, including a recent evaluation of the Tanzania Sunflower Seed Project. These publications available to all interested parties

SENEGAL

Association Senegalaise des Amis de la Nature
Section Regionale
B.P. 148
Thies, Senegal

ATTN: Amadou Sow

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY ASSOCIATION SENEGALAISE DES AMIS DE LA NATURE:

OBJECTIVES OF PROJECT: Raise the standard of living of rural population by promoting food self-sufficiency and by increasing income through marketing excess production.

LOCATION OF PROJECT: Region of Thies, Senegal

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Traditional methods

STAGE OF PROJECT: Palm oil is being processed at the village level. However, often it is not profitable to market because it commands such a low price.

DIFFICULTIES ENCOUNTERED: The association has not yet discovered how to expand and improve oil production in order to make it more profitable.

**ASSOCIATION SENEGALAISE DES AMIS DE LA NATURE IS
INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:**

- Project Design Strategies: pilot projects being done in the
Region of Thies.
- Technologies of Processing: new technologies and improved
traditional systems.
- Marketing & Economic Issues: identification of export markets.

**ASSISTANCE ASSOCIATION SENEGALAISE DES AMIS DE LA
NATURE CAN PROVIDE TO OTHERS:**

Will help others to implement and plan their programs.

NIGERIA

Bayero University
Chemistry Department
P.M.B. 3011
Kano, Nigeria

ATTN: Dr. J. T. Ayodele

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY DR. AYODELE:

OBJECTIVES OF PROJECT:	To research the nutritional value of indigenous food oils, to identify alternative sources for edible and soap oils, and to develop appropriate technologies for harvesting and refining these oils in order to reduce cost and increase productivity of small-scale processors.
LOCATION OF PROJECT:	Kano, Nigeria
TYPE OF OIL BEING RESEARCHED:	All plant oils found in Nigeria
TECHNOLOGY BEING RESEARCHED:	Solvent extraction Pressure extraction
STAGE OF PROJECT:	Dr. Ayodele has identified, characterized, and studied the nutritive value of various plant oils.
DIFFICULTIES ENCOUNTERED:	Dr. Ayodele has had difficulty in accessing current information on food oils.

DR. AYODELE IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation, but specifically technologies, design strategies, and organization for production.

ASSISTANCE DR. AYODELE CAN PROVIDE TO OTHERS:

Will share information on the physical/chemical/nutritive makeup of oils and will assist others in planning new programs.

CAMEROON & TANZANIA

Mr. Carl Bielenberg
RFD 1
Marshfield, Vermont 05658, United States

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
MR. BIELENBERG:**

OBJECTIVES OF PROJECT: To make available least-cost, reliable equipment for efficient oil extraction.

LOCATION OF PROJECT: Tanzania and Cameroon

TYPE OF OIL BEING PROCESSED: Sunflower, palm, palm kernel, coconut

TECHNOLOGY BEING USED: Sunflower: manually operated ram press (the Bielenberg press)
Palm: manual and motorized vertical axis Caltech expeller
Coconut: wet processing ram press

STAGE OF PROJECT: Equipment has been developed, tested, and modified. It is now being disseminated.

MR. BIELENBERG IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Project Design Strategies: other organizations working on design of equipment for food oil or grain processing, with a special concern for developing technologies for manufacturing this equipment.

Technologies of Processing: receiving quantitative information on extraction efficiencies of traditional oil-processing methods.

ASSISTANCE CARL BIELENBERG CAN PROVIDE TO OTHERS:

Will act as a consultant in selection of equipment for small-scale oil processing and in providing technical assistance for local manufacture of equipment. Can offer training at his mechanical workshop in the United States.

TANZANIA

Bunda Catholic Church
S.L.P. 1042
Bunda Via Musoma, Tanzania

ATTN: Reverend Laurenti Radice

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
BUNDA CATHOLIC CHURCH:**

OBJECTIVES OF PROJECT: To reduce the cost and increase the availability of cooking oil to rural people by promoting local production.

COLLABORATING AGENCY: Interest in project shown by:
District Agriculture Officers

LOCATION OF PROJECT: Bunda, Tanzania

TYPE OF OIL TO BE PROCESSED: Sunflower

STAGE OF PROJECT: Sunflower seeds have been successfully cultivated. Devising a practical way of extracting the oil remains to be done.

DIFFICULTIES ENCOUNTERED: No practical extraction process has been found.

**BUNDA CATHOLIC CHURCH IS INTERESTED IN INFORMATION ON
THE FOLLOWING TOPICS:**

Organization for Production: ways other programs have organized for production.

Technologies of Processing: technologies available for extracting sunflower seed oil, with emphasis on low cost (i.e., no large investment of foreign exchange) and ease of use.

TANZANIA

CAMARTEC
P.O. Box 764
Arusha, Tanzania

ATTN: L.L. Kiriama

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CAMARTEC:**

OBJECTIVES OF PROJECT: To create employment opportunities for, and increase incomes of, farmers by establishing in rural villages small-scale sunflower oil extraction units using manual sunflower seed oil presses.

COLLABORATING AGENCIES: *Appropriate Technology International (ATI)
*Evangelical Lutheran Church of Tanzania (E.L.C.T) <Lutheran World Relief>
Institute of Production Innovation
Themu Farm Implements
Centre for Agricultural Mechanization and Rural Technology
Ministry of Agriculture and Livestock Development

*See separate entry.

LOCATION OF PROJECT: Arusha, Tanzania

CONTACT PERSON: Lynn Schlueter

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Bielenberg ram press
IPI batch manual press

STAGE OF PROJECT: Thirty oil processing units have been established in 23 villages with approximately 20,000 liters of oil produced during the last year.

DIFFICULTIES ENCOUNTERED:

Sunflower seed crop attack by birds significantly lowered yield. Ram press, although manufactured locally, requires imported steel. This adds to the cost and makes equipment unaffordable for many farm families. Equipment servicing is expensive and difficult to provide, as the villages are widely scattered throughout the region.

CAMARTEC IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** strategies for building financial self-sufficiency into the project design.
- Organization for Production:** ways to increase efficiency.
- Technologies of Processing:** methods that can be used to encourage local manufacture of technologies, with emphasis on considerations of hygiene and efficiency.
- Marketing & Economic Issues:** ways to increase communication and accessibility of production centers for benefit of producers and endusers.
- Community or Beneficiary Involvement:** ways general life standards are affected by the introduction of technology.
- Role of Women:** impact of technology on women's workload.
- Impact of Government Policies:** ways non-government projects complement and supplement government efforts.

ASSISTANCE CAMARTEC CAN PROVIDE TO OTHERS:

Will share data from its project and any other relevant information requested.

KENYA

CARE/Kenya
Regional Technical Advisory Team
P.O. Box 43864
Nairobi, Kenya

ATTN: Hugh Allen

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY CARE/KENYA:

- OBJECTIVES OF PROJECT:** To increase efficiency and productivity of small-scale oil processing through development and introduction of appropriate technologies.
- LOCATION OF PROJECT:** East Africa and southern Africa
- TYPE OF OIL BEING PROCESSED:** Sunflower, coconut
- TECHNOLOGY BEING USED:** Bielenberg oil press
- STAGE OF PROJECT:** CARE/Kenya is conducting on-going research, design modifications, and manufacture of the Bielenberg oil press. The agency has compiled and published a users' manual for the Bielenberg press. Presses have been and are being placed, primarily in village-based family businesses.
- DIFFICULTIES ENCOUNTERED:** It is hard to balance the cost of manufacturing reliable equipment against the need to keep the equipment inexpensive and within the reach of small processors.

CARE/KENYA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Project Design Strategies:	strategies for keeping working capital costs affordable. Manufacturing and dissemination strategies.
Organization for Production:	case studies of private sector and community ownership of equipment.
Technologies of Processing:	hand-operated equipment for peanut and simsim processing.
Community or Beneficiary Involvement:	case studies of programs that are community managed.
Role of Women:	effects of intervention on women as consumers and as processors.
Impact of Government Policies:	effects of government pricing and marketing policies.

ASSISTANCE CARE/KENYA CAN PROVIDE TO OTHERS:

Bielenberg Press Users Manual available on request. Able to provide engineering consulting services to potential manufacturers.

LESOTHO

CARE/Lesotho
P.O. Box 682
Maseru, 100, Lesotho

ATTN: Steve Hollingworth

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY CARE/LESOTHO:

OBJECTIVES OF PROJECT: To encourage local manufacture and use of appropriate oil extraction technologies so that small-scale manufacturers and farmers have increased economic opportunities.

COLLABORATING AGENCY: Catholic Relief Services (CRS)

LOCATION OF PROJECT: Maseru, Lesotho

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Themis hydraulic press
Ram press

STAGE OF PROJECT: The Themis hydraulic press has been tested and found inappropriate, as production levels of the rural groups are not high enough to make the press economically feasible. Field testing of the ram press is being conducted.

DIFFICULTIES ENCOUNTERED: Trouble was encountered in identifying technologies that match production levels and scale of rural groups.

CARE/LESOTHO IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Technologies of Processing: other technologies for sunflower, peanut, babassu, and coconut oil processing.

ASSISTANCE CARE/LESOTHO CAN PROVIDE TO OTHERS:

Offers help in planning, implementing, or assessing oil projects.

GAMBIA

Catholic Relief Services (CRS)
P.O. Box 568
Banjul, Gambia

ATTN: Glen W. Knapp

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CRS/GAMBIA:**

OBJECTIVES OF PROJECT: To improve nutrition as well as increase incomes of rural Gambian people through the promotion and processing of sesame seeds and peanuts for oil.

LOCATION OF PROJECT: Gambia

TYPE OF OIL BEING PROCESSED: Sesame, peanut

TECHNOLOGY BEING USED: CECOCO "Hander" diesel-powered screw-type oil expeller

STAGE OF PROJECT: Sesame is being cultivated extensively nationwide. Sixteen oil processing plants are operating. Management committees are being trained to insure continuity of the program. Remaining to be accomplished is the development of a market for surplus sesame which, because of capacity constraints, cannot be processed at the processing centers.

DIFFICULTIES ENCOUNTERED: More sesame seed is being produced than can be processed. A market must be developed for this surplus seed or capacity for processing must be increased.

CRS/GAMBIA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: advice on management training at grassroots level.

Technologies of Processing: less expensive and simpler processing technologies.

Marketing & Economic Issues: assistance in developing a system of marketing.

ASSISTANCE CRS/GAMBIA CAN PROVIDE TO OTHERS:

Can give technical assistance to other projects.

RWANDA

Catholic Relief Services (CRS)
Rwanda Program
B.P. 65
Kigali, Rwanda

ATTN: Vivian Marin, Country Representative

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CRS/RWANDA:**

OBJECTIVES OF PROJECT: To increase agricultural revenue and the local supply of inexpensive cooking oil by promoting sunflower seed cultivation and organizing local oil production units.

LOCATION OF PROJECT: Kigali, Byumba, and Kibungo, Rwanda

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Sunflower Oil CECOCO dehuller with gasoline engine
CECOCO hand winnower
CECOCO expeller with diesel engine
(capacity 80-100 kg/hour)

STAGE OF PROJECT: CRS/Rwanda has contributed to a growing public awareness of sunflower cultivation that was unknown in the country. The agency has established three oil production units and begun training administrators to self-manage the production units.

DIFFICULTIES ENCOUNTERED: Birds have damaged sunflower crops and land is scarce. CRS has had difficulty in obtaining spare parts for the machines, which are imported from Japan.

CRS/RWANDA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** methods for identifying appropriate sites for small-scale oil extraction units in rural areas.
- Organization for Production:** methods others have used for organizing producers.
- Technologies of Processing:** technologies for sunflower oil extraction and oil conservation.
- Marketing & Economic Issues:** ways to conduct market studies and sales promotion.
- Community or Beneficiary Involvement:** ways to evaluate community or beneficiary involvement.
- Role of Women:** experiences of women in oil extraction projects in other countries.
- Impact of Government Policies:** identification of government agencies; policies that will facilitate project implementation.

MALI

Centre Canadien d'etude et Cooperation Internationale (CECI)
B.P. 109
Bamako, Mali

ATTN: Jean Lash

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CECI:**

- OBJECTIVES OF PROJECT:** To increase the incomes of rural women by introducing manual presses and promoting community organization so that the presses are collectively owned and operated.
- COLLABORATING AGENCIES:** Administration of Agricultural Mechanization
Compagnie Malienne de
Developpement des Textiles.
- LOCATION OF PROJECT:** Koutiala, Fana, Koulikoro, and Selingé, Mali
- TYPE OF OIL BEING PROCESSED:** Shea
- TECHNOLOGY BEING USED:** Manual press
- STAGE OF PROJECT:** Sixteen manual presses have been installed. In addition, soap production has been introduced in one village.
- DIFFICULTIES ENCOUNTERED:** Local women have resisted adopting new technology; five of the sixteen presses installed are not being used. The project has also had technical difficulties.

CECI IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** reasons for, and strategies for overcoming, resistance to the use of new technology.
- Technologies of Processing:** ways the manual press compares with other technologies.
- Community or Beneficiary Involvement:** perceived impact of new technology and its effect on traditional forms of organization.
- Role of Women:** social and economic impact of new technology on the lives of women.

MALI

CEPAZE
18 rue de Varennes
75007 Paris, France

ATTN: Mr. Bernard Clamagirsud

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CEPAZE:**

OBJECTIVES OF PROJECT: To upgrade from manual to motorized equipment, reducing time and labor needed for producing greater yields so that the income of village women will be increased.

COLLABORATING AGENCY: Appropriate Technology International (ATI)

LOCATION OF PROJECT: Dara, Mali

TYPE OF OIL BEING PROCESSED: Shea

TECHNOLOGY BEING USED: Motor driven shea nut grinder
Motor driven shea nut centrifuge

STAGE OF PROJECT: Motor driven shea nut grinder and centrifuge have been developed and field tested. The grinder has exhibited strong commercial promise. The current version of the centrifuge requires further testing.

DIFFICULTIES ENCOUNTERED: It has been hard to locate a Malian entrepreneur willing to launch construction of the prototype and modify it as it is tested.

CEPAZE IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways to coordinate the financial needs of the program with the needs and demands of donors to the program.
- Organization for Production:** technical training methods.
- Technologies of Processing:** literature on new technologies.
- Marketing & Economic Issues:** identification of export opportunities.
- Role of Women:** methods of organizing women so that, as the technology is introduced, women remain in control of the project.
- Impact of Government Policies:** identification of any conflicts of interest between the government, the factory, and the villagers.

ZIMBABWE

**Chitepo Agriculture Training Centre (CATC)
Private Mail Bag #23
Julias Dale, Zimbabwe**

ATTN: Ton Oonk

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CATC:**

OBJECTIVES OF PROJECT: To determine feasibility of extracting cooking oil from sunflower seeds on a commercial basis, as an income generating project for farmers' groups.

COLLABORATING AGENCY: NOVIB

LOCATION OF PROJECT: Julias Dale, Zimbabwe

TYPE OF OIL BEING PROCESSED: Sunflower, peanut

STAGE OF PROJECT: Testing has begun on various technologies for processing sunflower seed oil.

DIFFICULTIES ENCOUNTERED: The percentage of oil extracted from the seed is very low; CATC is concerned about the possible toxicity of the oil; government regulations are often an obstacle to the development of small-scale independent food oil processing.

CATC IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: ways others have established cooperative, oil processing cottage industries.

Technologies of Processing: facts and figures on different types of oil-processing technology.

ASSISTANCE CATC CAN PROVIDE TO OTHERS:

Will write up and disseminate its experiences and respond to specific questions posed by others.

GAMBIA

**Christian Children's Fund (CCF)
Private Mail Bag No. 2
Banjul, Gambia**

ATTN: Pa Louis Gomez

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CCF/GAMBIA:**

OBJECTIVES OF PROJECT: To establish small-scale oil-processing industries in rural Gambian villages in order to improve nutrition and increase incomes through the marketing of surplus oil.

COLLABORATING AGENCY: Government of Gambia

LOCATION OF PROJECT: Somita, Sibanor, Brufut, Kabafita, Jamisa, and Sanyang, Gambia

TYPE OF OIL TO BE PROCESSED: Peanut, sesame, sunflower, palm

STAGE OF PROJECT: Project is in an early implementation phase. Farm lands have been identified. Cultivation of the seed and organization for production of oil remains to be done.

**CCF/GAMBIA IS INTERESTED IN INFORMATION ON THE
FOLLOWING TOPICS:**

Project Design Strategies: components of design strategies
that are specific to the production
and processing of food oils.

Technologies of Processing: low-cost, simple technologies.

Marketing & Economic Issues: marketing strategies and ways
food oils relate to health and
nutrition

KENYA

Christian Children's Fund (CCF)
P.O. Box 14038
Nairobi, Kenya

ATTN: Margery Kabuya

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CCF/KENYA:**

OBJECTIVES OF PROJECT: To reduce malnutrition by increasing the amount of vegetable oil in the local diet.

COLLABORATING AGENCIES: Catholic Relief Services (CRS)
Catholic Mission

LOCATION OF PROJECT: Tharaka, Meru District, about 240 miles northeast of Nairobi, Kenya

CONTACT PERSON: Fr. Orazio Mazzucchi

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Extracting machine

STAGE OF PROJECT: CCF/Kenya has introduced a new extracting machine that is used by approximately 500 families who bring their seeds to be processed. This has resulted in an increase in the use of sunflower oil in their family diets and measurably improved nutritional levels.

**CCF/KENYA IS INTERESTED IN INFORMATION ON THE
FOLLOWING TOPICS:**

All aspects of other programs that will help CCF/Kenya to modify and improve its own.

ASSISTANCE CCF/KENYA CAN PROVIDE TO OTHERS:

Will help other agencies plan their programs.

TOGO

Conseils Gestion Afrique Togo
Initiatives des Communautés de Base (CONGAT/ICB)
B.P. 1857
Lome, Togo

ATTN: Agbo Kodjo Doh

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY CONGAT/ICB:

OBJECTIVES OF PROJECT: To increase income through creation of small village enterprises and introduction of improved technology.

COLLABORATING AGENCIES: CFPI Tsevie-Togo
CFAE Agou-Togo
Government Social Services
SOTOGO Savanes

LOCATION OF PROJECT: Zio and Tone Prefectures, Togo

CONTACT PERSON: Edjossan

TYPE OF OIL BEING PROCESSED: Palm, palm kernel, peanut

TECHNOLOGY BEING USED: Improved traditional methods

STAGE OF PROJECT: Improved traditional technologies and procedures have been identified. Comparison tests by women's groups of the various technologies have been conducted. Preintroductory tests are underway to identify possible problems before full-scale introduction takes place.

DIFFICULTIES ENCOUNTERED: Problems developed in supplying of raw materials, management of the revolving loan fund component of the program, storing of refined oil, and identifying commercial outlets for oil. Also, the program participants had a relatively unsophisticated technical aptitude.

CONGAT/ICB IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Technologies of Processing: improved procedures at the village level, with special emphasis on intermediary procedures.

ASSISTANCE CONGAT/ICB CAN PROVIDE TO OTHERS:

Offers to help plan and implement other projects involved in processing palm, palm kernel, or peanut oil.

SIERRA LEONE

CWASRO
P.O. Box 981
Freetown, Sierra Leone

ATTN: Godfrey L. Jones

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
CWASRO:**

OBJECTIVES OF PROJECT: To increase incomes of rural farmers by introducing simple hand press technology, thereby improving the quality of the oil so that it will command a higher price at market.

COLLABORATING AGENCY: Ministry of Agriculture

LOCATION OF PROJECT: Newton and Western Area, Sierra Leone

CONTACT PERSON: Mr. R. D. Hill

TYPE OF OIL BEING PROCESSED: Palm, palm kernel

TECHNOLOGY BEING USED: Hand press

STAGE OF PROJECT: Project is in the planning stage.

DIFFICULTIES ENCOUNTERED: Local farmers are resisting the new technology.

CWASRO IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Technologies of Processing:** advantages and disadvantages of processing methods being used in various areas. Identification of types of hand presses in use in on-going projects.
- Community or Beneficiary Involvement:** methods for overcoming resistance to change.

SENEGAL

**Environment and Development Action in the Third World
(ENDA)**

B.P. 3370

Dakar, Senegal

ATTN: Pascal Sambou

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ENDA:**

OBJECTIVES OF PROJECT: To increase income of rural producers by introducing improved technology that will increase yields and improve the quality of oil produced.

LOCATION OF PROJECT: Casamance Region, south Senegal

TYPE OF OIL BEING PROCESSED: Palm, palm kernel

TECHNOLOGY BEING USED: Oil press
Kernel crusher

STAGE OF PROJECT: Improved oil press has been developed and introduced. Kernel crusher needs improvement.

DIFFICULTIES ENCOUNTERED: Difficulties arose in organizing oil producers and in follow-up after introduction of machinery.

ENDA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** design strategy concerned with all aspects vs one directed at only a part of the oil sector.
- Organization for Production:** collective vs. individual production.
- Technologies of Processing:** kernel crushers. Ways to maintain quality control and storage.
- Marketing & Economic Issues:** identification of agents and likely markets.
- Community or Beneficiary Involvement:** ways to identify and target the interests of the beneficiary group.
- Role of Women:** the role of women in production and distribution of profits.
- Impact of Government Policies:** ways a project relates to other government programs, particularly conservation programs.

ASSISTANCE ENDA CAN PROVIDE TO OTHERS:

Will assist in preparation and evaluation of projects and is able to test appropriate technologies. ENDA publications on food oils processing available to interested parties.

TANZANIA

Evangelical Lutheran Church of Tanzania (ELCT)
ELCT/DAR Village Sunflower Project
P.O. Box 1409
Arusha, Tanzania

ATTN: Mr. Lynn Schlueter

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ELCT/DAR VILLAGE SUNFLOWER PROJECT:**

OBJECTIVES OF PROJECT: To create employment opportunities for, and increase incomes of, farmers by establishing small-scale sunflower oil extraction units using manual sunflower seed oil presses in rural villages.

COLLABORATING AGENCIES: *Appropriate Technology International (ATI)
Tanzanian Government Agencies
*CAMARTEC

*See separate entry.

LOCATION OF PROJECT: Arusha, Tanzania

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Bielenberg ram press
IPI batch manual press

STAGE OF PROJECT: Thirty-four oil-processing units have been established in 23 villages, with approximately 20,000 liters of oil produced during the last year.
Work continues with local manufacturers to improve design of hand-operated presses, to provide oil-rich seed varieties to farmers, and to expand the program to other villages.

DIFFICULTIES ENCOUNTERED: Difficulty has been experienced in perfecting the hand-operated press while keeping its low cost and ease of use and maintenance. Problems in identifying and providing sunflower seed with high-oil content hampered progress.

ASSISTANCE ELCT/DAR VILLAGE SUNFLOWER PROJECT CAN PROVIDE TO OTHERS:

Would like to share its experience and information on the Bielenberg sunflower seed press with others through workshops, visits to its program, or any other appropriate method.

Evangelical Mission Guinea-Bissau
C.P. 49
Bissau, Guinea-Bissau

ATTN: Norman Cuthbert

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
THE EVANGELICAL MISSION GUINEA-BISSAU:**

OBJECTIVES OF PROJECT:	To introduce technology to rural villages, thereby increasing production and decreasing labor and time needed for oil production.
LOCATION OF PROJECT:	Bissagos Islands, Guinea-Bissau
TYPE OF OIL BEING PROCESSED:	Palm
TECHNOLOGY BEING USED:	Hand operated oil press Diesel driven palm kernel crusher
STAGE OF PROJECT:	A small number of villages are using the equipment. More presses are needed. Equipment, appropriate to the village level, needs to be developed to separate palm fruit and kernel.
DIFFICULTIES ENCOUNTERED:	It is hard to find simple equipment that can be used at village level to handle the total oil-processing procedure.

EVANGELICAL MISSION GUINEA-BISSAU IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways to help small groups design a project.
- Organization for Production:** ways to help families organize their own production.
- Technologies of Processing:** any small processing unit that can be used profitably at village level. Methods for storage.
- Marketing & Economic Issues:** identification of material for use in training in marketing techniques. Identification of other oil-producing crops that might be appropriate for introduction.

GHANA

Evans Developers, Inc.
P.O. Box 701
Cape Coast, Ghana

ATTN: Hendwick C. Evans, President

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
EVANS DEVELOPERS:**

OBJECTIVES OF PROJECT: To increase income of rural women through organization of a shea pickers cooperative and establishment of a viable and self sustaining shea oil processing plant.

LOCATION OF PROJECT: Northern Ghana

TYPE OF OIL BEING PROCESSED: Shea

TECHNOLOGY BEING USED: 20T/D shea butter processing and deodorizing plant

STAGE OF PROJECT: The project is in its initial planning stage.

**EVANS DEVELOPERS IS INTERESTED IN INFORMATION ON THE
FOLLOWING TOPICS:**

Technologies of Processing: ways to eliminate latex from the shea kernel. (Latex in the kernel is a major obstacle in the industrial extraction of shea butter.)

Marketing & Economic Issues: identification of likely markets for export, particularly in shea butter importing nations such as Japan, Denmark, and the United Kingdom.

ASSISTANCE EVANS DEVELOPERS CAN PROVIDE TO OTHERS:

Will provide assistance in designing food oil projects.

UGANDA

Experiment in International Living (EIL)
P.O. Box 9007
Kampala, Uganda

ATTN: Michael Silberman, Africa Coordinator

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY EIL:

OBJECTIVE OF PROJECT: To identify, locate, assess, modify, and introduce oil processing technologies for use by farmers in the processing of sugar and cooking oil, thereby improving production and increasing income.

COLLABORATING AGENCIES: Makerere University
Ministry of Agriculture
Ministry of Cooperatives
Management Training and Advisory Center (MTAC)

LOCATION OF PROJECT: Kampala, Uganda

TYPE OF OIL BEING PROCESSED: Sunflower, peanut, sesame

TECHNOLOGY BEING USED: Bielenberg ram press
Agrioil hydraulic press
Locally made screw press
Simon Rosedown Mini 40 Expeller
Locally made decorticator/winnower
(bicycle driven)
Seed scorcher

The following equipment has been ordered for testing and modification:

Komet single screw vegetable oil expeller (Germany)
Nand Singh sunflower oil ram press (Tanzania)
Tiny oil mill machinery (India)
Steinlite moisture meter
Hydraulic pressure gauge

Constant temperature over seed pre-treatment
Steinlite oil tester

STAGE OF PROJECT:

EIL has procured equipment for testing and on-going modification. The agency facilitates local manufacture of a decorticator/winnower and seed scorcher and has conducted a national baseline survey of Uganda's edible oil production and sugar cane jageries. Manufacturing of modified presses for field testing has been started. Identification of sunflower seed varieties and their respective oil content has been carried out. Tests have been completed on the effect of decortication on the oil yield, the effect of scorching temperature on oil yield, and the influence of pressing stages on the oil yield.

DIFFICULTIES ENCOUNTERED:

Problems include vehicle breakdowns, delays in international procurement of machines and supplies, high inflation, and unreliable power supplies.

EIL IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Project Design Strategies:

methodologies for testing and research.

Organization for Production:

small-scale enterprise development with cooperative societies and training institutes.

Technologies of Processing:

literature review of publications related to oil processing.

ASSISTANCE EIL CAN PROVIDE TO OTHERS:

Will share the program's findings and recommendations with any interested parties.

SENEGAL

Femme Developpement et Entreprise en Afrique
Rue I x F Point E.
B.P. 3921
Dakar, Senegal

ATTN: Soukeyna Ndiaye

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
FEMME DEVELOPPEMENT ET ENTREPRISE EN AFRIQUE:**

OBJECTIVES OF PROJECT: To create income opportunities for women by assisting in setting up enterprises through the provision of training and credit.

LOCATION OF PROJECT: Senegal

STAGE OF PROJECT: The agency is facilitating and coordinating a number of small enterprise programs run by women entrepreneurs.

**FEMME DEVELOPPEMENT ET ENTREPRISE EN AFRIQUE IS
INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:**

Technologies of Processing: technologies and training in the technology.

Marketing & Economic Issues: the economic feasibility of edible oil manufacture.

Role of Women: impact of intervention on women.

**ASSISTANCE FEMME DEVELOPPEMENT ET ENTREPRISE EN
AFRIQUE CAN PROVIDE TO OTHERS:**

Will share expertise on issues relating to organization of women entrepreneurs. Able to assist others in evaluating their programs.

GHANA

Forces of Light
P.O. Box B-15
Tema, Ghana

ATTN: Kudzo Agbeve

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY FORCES OF LIGHT:

OBJECTIVES OF PROJECT: To upgrade traditional methods of oil processing and organize a production and marketing cooperative to increase income of rural women.

LOCATION OF PROJECT: Ghana

TYPE OF OIL BEING PROCESSED: Peanut, sunflower,

STAGE OF PROJECT: Program design is in the beginning stage. Land has been acquired for cultivating sunflower seeds and peanuts.

FORCES OF LIGHT IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation that will help Forces of Light plan its program. Identification of export marketing opportunities.

ASSISTANCE FORCES OF LIGHT CAN PROVIDE TO OTHERS:

Will help others implement their programs.

GHANA

Ghana Organisation of Volunteer Assistance (GOVA)
P.O. Box 5796
Accra-North, Ghana

ATTN: Emmanuel T. Sawyer

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY GOVA:

OBJECTIVES OF PROJECT:	To process, store, and market food oils to increase income and raise the standard of living of rural women.
COLLABORATING AGENCY:	Government Ministry of Rural Development
LOCATION OF PROJECT:	Supomu Dunkwa and Nkran, Western Region, Ghana
TYPE OF OIL BEING PROCESSED:	Palm, palm kernel, coconut
STAGE OF PROJECT:	Project is in the planning stage.
DIFFICULTIES ENCOUNTERED:	Obstacles arose in procurement and acquisition of processing equipment.

GOVA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation that will help GOVA plan its program.

KENYA

Gichiche Primary School, 4-K Club
P.O. Box 6035
Runyenjes
Embu, Kenya

ATTN: Mugo Misheck

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
GICHICHE PRIMARY SCHOOL, 4-K CLUB:**

OBJECTIVES OF PROJECT: To produce income for the school by cultivating and selling macadamia seedlings to local farmers.

LOCATION OF PROJECT: Mwenendeḡa Primary School, Kenya

CONTACT PERSON: Teresios Naftali Njiru

TYPE OF OIL BEING PROCESSED: Macadamia

STAGE OF PROJECT: Nursery has been laid out. A complete water system needs to be installed.

DIFFICULTIES ENCOUNTERED: Because of lack of piped-in water hauling water over long distances has been necessary.

**GICHICHE PRIMARY SCHOOL, 4-K CLUB IS INTERESTED IN
INFORMATION ON THE FOLLOWING TOPICS:**

The Gichiche Primary School is interested in all aspects of program design and implementation to help it make its program a success.

**ASSISTANCE GICHICHE PRIMARY SCHOOL, 4-K CLUB CAN
PROVIDE TO OTHERS:**

Will assist in assessing and evaluating other programs.

LESOTHO

Government of Lesotho
Appropriate Technology Section (ATS)
P.O. Box #686
Maseru, Lesotho

ATTN: B. M. Rafoncke

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ATS:**

OBJECTIVES OF PROJECT: To design, introduce, and promote appropriate technologies to improve the standard of living in rural areas.

LOCATION OF PROJECT: Maseru, Lesotho

TECHNOLOGY BEING USED: Fuel-efficient wood-burning stove

STAGE OF PROJECT: A fuel efficient wood burning stove has been designed and introduced. Training of trainers and training artisans for local production remains to be done.

DIFFICULTIES ENCOUNTERED: Difficulty in providing capital or credit to local artisans for production of the stoves has hampered progress.

**ATS IS INTERESTED IN INFORMATION ON THE FOLLOWING
TOPICS:**

All aspects of other programs, particularly those that explore new technologies and methods of training and introducing that technology.

ASSISTANCE ATS CAN PROVIDE TO OTHERS:

Willing share its experience with others involved in similar activities.

GHANA

Holy Family Hospital
P.O. Box 21
Berekum, B/A, Ghana

ATTN: Sr. Margaret Moran, SRN

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
HOLY FAMILY HOSPITAL:**

OBJECTIVES OF PROJECT: To produce winged bean seed oil for use in a weaning food in order to improve nutrition as well as increase income of rural farmers.

COLLABORATING AGENCIES: PHC Program of Berekum/Jaman District
District Medical Officer Dr. J. Mouch
Dutch Embassy Fund

LOCATION OF PROJECT: Adamsu, Brong-Ahafo, Ghana

CONTACT PERSON: Tom Appiah

TYPE OF OIL BEING PROCESSED: Winged Bean

STAGE OF PROJECT: Holy Family Hospital's weaning food project functioning. Winged Bean crop has been planted. Oil production is ready to begin as soon as an appropriate press can be found.

DIFFICULTIES ENCOUNTERED: Progress of program has been hampered by inability to locate a hand oil press that will process winged beans.

HOLY FAMILY HOSPITAL IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Organization for Production:** identification of simple materials available for the design of a production unit.
- Technologies of Processing:** identification of a hand or small electric model oil press suitable for winged bean seed processing.
- Marketing & Economic Issues:** description of others' experiences in marketing oils.

ZAMBIA

Human Settlements of Zambia (HUZA)
P.O. Box 50141
Lusaka, Zambia

ATTN: Harrington E. Jere

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY HUZA:

OBJECTIVES OF PROJECT: To increase self-sufficiency of low-income rural groups by promoting the local processing of oils and manufacture of oil-based products.

LOCATION OF PROJECT: Lusaka, Zambia

TYPE OF OIL BEING PROCESSED: Peanut, soya

TECHNOLOGY BEING USED: Traditional manual methods

STAGE OF PROJECT: HUZA is conducting training in the production of cooking oils, soap, and soya milk.

DIFFICULTIES ENCOUNTERED: Local canning and preservation techniques are inadequate.

HUZA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: materials supply, storage, and distribution.

Technologies of Processing: labor saving technologies.

Marketing & Economic Issues: bookkeeping and administrative methods.

Role of Women: ways to expand the scope of women's involvement beyond meeting their private needs into small-scale commercial production.

ASSISTANCE HUZA CAN PROVIDE TO OTHERS:

Can provide training in the manufacture of oil-based products.

MOROCCO

IAV. Hassan II
Department of Food Chemistry and Biochemistry
P.O. Box 6202
Rabat, Morocco

ATTN: Dr. Rahmani Mohammed

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
IAV. HASSAN II:**

OBJECTIVES OF PROJECT:	To research and develop improved technology aimed at increasing yield and producing better quality argan and olive oil.
COLLABORATING AGENCY:	Provincial Agricultural Administration
LOCATION OF PROJECT:	Southwest and Central Morocco
TYPE OF OIL BEING PROCESSED:	Argan, olive
TECHNOLOGY BEING USED:	Traditional system with animal traction for crushing
STAGE OF PROJECT:	IAV. Hassan II has identified elements of the traditional extraction system that need to be improved. Subsequently, the agency will develop and implement the necessary improvements.
DIFFICULTIES ENCOUNTERED:	Development of improved extraction method is complicated by the fact that the nuts have very hard shells.

IAV. HASSAN II IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: distribution systems for the oil seeds.

Technologies of Processing: machines capable of processing seeds with very hard shells.

Marketing & Economic Issues: market studies.

Impact of Government Policies: strategies for enlisting government help in expanding the project.

Institut de Recherche pour les Huiles et Oleagineux (IRHO)
11 square Petrarque
75116 Paris, France

ATTN: Olivier Dufour

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY IRHO:

OBJECTIVES OF PROJECT: To research for the development of tropical, perennial and annual oil-producing plants.

LOCATION OF PROJECT: Paris, France

CONTACT PERSON: J. Fleury

TYPE OF OIL BEING PROCESSED: Palm, coconut, peanut

TECHNOLOGY BEING USED: Diverse technologies

STAGE OF PROJECT: Research is being conducted in genetics, agronomy, cultivation techniques, and oil-processing technology development. Results of the research are disseminated through various publications and consultancy services are provided on request.

IRHO IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Project design strategies used by other programs; marketing and economic issues.

ASSISTANCE IRHO CAN PROVIDE TO OTHERS:

Has expertise in agronomy, plant cultivation techniques, and various agricultural technologies, and can provide data on plant material and reviews of technologies, as well as training.

SENEGAL

Institut de Technologie Alimentaire
B.P. 2765
Hann Dakar, Senegal

ATTN: Kane Amadou

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
INSTITUT DE TECHNOLOGIE ALIMENTAIRE:**

OBJECTIVES OF PROJECT: To conduct research that will identify the best type of clay, both in terms of absorption and availability, for use in the elimination of aflatoxin from peanut oil.

LOCATION OF PROJECT: Mycotoxins Laboratory, ITA, Dakar, Senegal

TYPE OF OIL BEING PROCESSED: Peanut

TECHNOLOGY BEING USED: Clay for the elimination of aflatoxin from edible oils

STAGE OF PROJECT: Preliminary tests with bentonite have been conducted.

**INSTITUT DE TECHNOLOGIE ALIMENTAIRE IS INTERESTED IN
INFORMATION ON THE FOLLOWING TOPICS:**

Marketing & Economic Issues: importance of market demand.

Impact of Government Policies: effect of government on traditional methods of production.

**ASSISTANCE INSTITUT DE TECHNOLOGIE ALIMENTAIRE CAN
PROVIDE TO OTHERS:**

Will disseminate results of its research as well as information on the health effects of aflatoxin consumption. If the research produces conclusive results, will aid in the planning and implementation of activities aimed at reducing aflatoxin in edible oils.

NIGERIA

Institute of Agricultural Research and Training (IAR & T)
Private Mail Bag #5029 AE
Moor Plantation
Ibadan, Nigeria

ATTN: Dr. P. O. Oyekan
Mrs. S. M. Osho

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED
BY IAR & T:**

OBJECTIVES OF PROJECT: To increase income and improve nutrition of small-scale farmers and rural villagers by promoting soya production and utilization.

COLLABORATING AGENCIES: *International Institute of Tropical Agriculture (IITA)
State Ministry of Social Development
*See separate entry.

LOCATION OF PROJECT: Oyo State, Nigeria

CONTACT PERSONS: Dr. P. O. Oyekan
Mrs. S. M. Osho, Mr. H. A. Ogundipe

TYPE OF OIL BEING PROCESSED: Soya

TECHNOLOGY BEING USED: Screw press

STAGE OF PROJECT: Farmers have been trained in the cultivation of soya. Training has been conducted on the household use and nutritional benefits of soya. Consumer surveys and marketing studies have been completed that indicate that soya oil is acceptable to consumers and is commercially viable. The introduction of processing technology and the training of women for cottage-level processing remains to be done.

DIFFICULTIES ENCOUNTERED: The devaluation of local currency has raised the cost of equipment beyond the reach of many small-scale processors.

IAR & T IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** methods for sustaining long-term projects.
- Organization for Production:** ways to organize cooperatives for production.
- Technologies of Processing:** technologies for small-scale soya oil extraction and availability of training.
- Marketing & Economic Issues:** low-cost packaging techniques and materials for soya products.
- Role of Women:** women's role in production and food crop processing.

ASSISTANCE IAR & T CAN PROVIDE TO OTHERS:

Will provide information on soya production and household utilization. Assist in project planning, training, implementation, and assessment.

NIGERIA

International Institute of Tropical Agriculture (IITA)
P.M.B. 5320
Ibadan, Nigeria

ATTN: H. O. Ogundipe

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY IITA:

OBJECTIVES OF PROJECT: To improve nutrition and increase income of rural villagers and farmers by promoting the use and manufacture of soya oil.

COLLABORATING AGENCY: International Development Research Center (IDRC)

LOCATION OF PROJECT: Ibadan, Nigeria

TYPE OF OIL BEING PROCESSED: Soya

TECHNOLOGY BEING USED: Screw press

STAGE OF PROJECT: The program is in the early stages of implementation. Technologies are being identified and strategies devised for promoting home use of soya oil.

DIFFICULTIES ENCOUNTERED: There has been trouble identifying and modifying, when necessary, appropriate technologies for the village level.

IITA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation, with particular emphasis on strategies for encouraging the acceptance and use of soya oil as well as appropriate oil-processing technologies.

ASSISTANCE IITA CAN PROVIDE TO OTHERS:

Has the facilities and expertise to provide chemical analyses of oils.

GHANA

ISSER
P.O. Box 74
University of Ghana
Legon, Ghana

ATTN: Dr. W. Asenso Okyere

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ISSER:**

OBJECTIVES OF PROJECT: To conduct research on production issues so as to determine processing bottlenecks and identify some of the constraints on the production of raw materials.

COLLABORATING AGENCIES: Ministry of Agriculture
Vegetable oil mills

LOCATION OF PROJECT: University of Ghana, Legon, Ghana

TYPE OF OILS BEING RESEARCHED: Peanut, palm, coconut

STAGE OF PROJECT: Visits to processing units have been made and interviews with vegetable oil farmers have been conducted.

DIFFICULTIES ENCOUNTERED: Research indicated that there was a large amount of idle capacity in Ghana because of lack of adequate production of raw materials.

ISSER IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** methodologies for studying problems in the food oils sector.
- Organization for Production:** stages of production and identification of people involved. Identification of constraints to production.
- Technologies of Processing:** literature on technologies.
- Marketing & Economic Issues:** marketing channels; marketing margins.
- Community or Beneficiary Involvement:** ways the community or consumers are involved in oil processing.
- Role of Women:** any gender issue studies.
- Impact of Government Policies:** effect of government on capacity utilization, raw material availability, and price determination.

ASSISTANCE ISSER CAN PROVIDE TO OTHERS:

Will help organize field work or surveys on the availability of raw materials, constraints upon production, and acquisition of processors.

KENYA

Kenya Energy and Environment Organizations (KENGO)
P.O. Box 48197
Nairobi, Kenya

ATTN: Gilbert Arum

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY KENGO:

OBJECTIVES OF PROJECT: To improve nutrition and increase income of the rural population by promoting the consumption and sale of indigenous fruits and vegetables.

COLLABORATING AGENCIES: Kenya Industrial Research Institute
Forest Dept. & Ministry of Agriculture
Diocese of Kitri

LOCATION OF PROJECT: Kitri and Bungona districts, Kenya

STAGE OF PROJECT: Basic research, identifying indigenous fruit and vegetable crops, has been completed. Work remains to be done on developing new processing and storage technologies and disseminating the results of the research and development activities.

DIFFICULTIES ENCOUNTERED: There is a general lack of awareness of importance of indigenous foods.

KENGO IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Organization for Production:** strategies for organizing at the grassroots level.
- Technologies of Processing:** appropriate technologies for the rural community.
- Impact of Government Policies:** ways to change conflicting policies.

ASSISTANCE KENGO CAN PROVIDE TO OTHERS:

Can offer resource appraisal, i.e., aid in pre-project planning and implementation.

ZIMBABWE

Mbungo Farming Cooperative
Mbungo Estates
P.O. Mbungo via Masuingo, Zimbabwe

ATTN: Vindo Madzidzakurwa
Simon Paspamire

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY MBUNGO FARMING COOPERATIVE:

OBJECTIVES OF PROJECT: To establish an edible oil-exPELLing industry to produce income for the Mbungo Farming Cooperative.

COLLABORATING AGENCIES: African Development Foundation
Ecological Designs of Masuingo
(helping to install the equipment)

LOCATION OF PROJECT: Masuingo, Zimbabwe

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Japanese HANDEK-54 equipment

STAGE OF PROJECT: Program is in the early stage of implementation. The agency plans to cultivate and harvest approximately 85 hectares of sunflower seed, install an oil expeller for refining oil, and sell oil in bulk to local markets.

DIFFICULTIES ENCOUNTERED: High import duties make importing equipment expensive and often difficult.

MBUNGO FARMING COOPERATIVE IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Technologies of Processing: technologies and technical training.

TANZANIA

Mr. Ismail Mwassa
P.O. Box 4323
Dar Es Salaam, Tanzania

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED:

- OBJECTIVES OF PROJECT:** To increase availability and reduce cost of food oils by locally producing oils using improved technologies.
- LOCATION OF PROJECT:** Dar es Salaam, Tanzania
- CONTACT PERSON:** Shaaban Mrisho
- TYPE OF OIL BEING PROCESSED:** Palm, coconut, masambu
- TECHNOLOGY BEING USED:** Locally made 10-horsepower electric expeller
- STAGE OF PROJECT:** Mr. Mwassa has developed a 10-horse power electric expeller that is manufactured locally and successfully extracts oil from palm kernels. However, an adequate way of further improving the quality of the oil through further refining has not been found.
- DIFFICULTIES ENCOUNTERED:** Problems arose in devising a low-cost, local solution for further refining the extracted oil, in bringing the raw materials to be processed, and then in transporting the final product to end users.

MR. MWASSA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways to build financial self-sufficiency, planning for future expansion of the project.
- Organization for Production:** ways to make the most efficient use of local resources.
- Technologies of Processing:** technologies that double-refine, deodorize, and bleach oils in order to process margarine.
- Marketing & Economic Issues:** marketing techniques and ways of marketing by-products of oil processing such as selling oil cake for animal feed.

ASSISTANCE MR. MWASSA CAN PROVIDE TO OTHERS:

Invites others to visit its program.

CAMEROON

National Center of Agricultural Mechanization
B.P. 1040
Yaounde, Cameroon

ATTN: Jules Tetka

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
NATIONAL CENTER OF AGRICULTURAL MECHANIZATION:**

OBJECTIVES OF PROJECT: To develop simple oil processing technologies appropriate to the village level.

COLLABORATING AGENCY: International Development Research Center (IDRC)

LOCATION OF PROJECT: Yaounde, Cameroon

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Continuous palm oil press
Pulper
Clarifier

STAGE OF PROJECT: A continuous palm oil press has been constructed (145 kilos of nuts/hour) as well as a pulper and clarifier. Testing technologies and constructing new prototypes continue.

DIFFICULTIES ENCOUNTERED: Problems arose in accessing information on other technologies and establishing collaborative relationships with other groups who are working in this area.

NATIONAL CENTER OF AGRICULTURAL MECHANIZATION IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** methods for tackling identified problems; establishment of specifications.
- Organization for Production:** large-scale operations of prototypes already field-tested.
- Technologies of Processing:** low-yield small palm oil presses.
- Marketing & Economic Issues:** market studies done before operation.
- Community or Beneficiary Involvement:** contractual relationships with end users of the equipment developed.
- Role of Women:** gender-related studies.
- Impact of Government Policies:** methods for obtaining government support.

ASSISTANCE NATIONAL CENTER OF AGRICULTURAL MECHANIZATION CAN PROVIDE TO OTHERS:

Help in the assessment of manual palm oil presses or other small equipment used in processing palm oil.

GHANA

National Service Secretariat
State House
P.O. Box 46
Accra, Ghana

ATTN: Emma Hammond

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
NATIONAL SERVICE SECRETARIAT:**

OBJECTIVES OF PROJECT: To provide upgraded technology that can produce an improved "Dzomi" palm oil and to increase income by promoting marketing of the extracted oil.

COLLABORATING AGENCY: Volunteer Service Overseas

LOCATION OF PROJECT: Christian Village, Accra, Ghana

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Improved cookstove
Traditional mortar and pestle

STAGE OF PROJECT: New cookstove has been designed and introduced.

DIFFICULTIES ENCOUNTERED: Difficulty was experienced in determining processing procedure that would produce the improved "Dzomi" type palm oil.

NATIONAL SERVICE SECRETARIAT IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies: project methodologies.
- Organization for Production: technical training.
- Technologies of Processing: appropriate technologies, specifically on extractors and clarifiers.

ASSISTANCE NATIONAL SERVICE SECRETARIAT CAN PROVIDE TO OTHERS:

Will assist others in planning and organizing for community animation.

ZIMBABWE

Organisation of Rural Associations for Progress (ORAP)
P.O. Box 877
Bulawayo, Zimbabwe

ATTN: Ekron Nyoni

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY ORAP:

OBJECTIVES OF PROJECT: To improve nutrition by compiling and disseminating recipes and data on traditional foods of Zimbabwe.

LOCATION OF PROJECT: Bulawayo, Zimbabwe

STAGE OF PROJECT: Project is in the early design phase. ORAP has compiled and edited a traditional recipes cookbook. The agency is determining the feasibility of beginning a food oil processing program.

ORAP IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of food oil processing that will help ORAP decide whether or not to begin a program of its own. Ways others implement their programs, ways self-sustainability of local production can be achieved.

ASSISTANCE ORAP CAN PROVIDE TO OTHERS:

Will help assess other projects.

CAMEROON

Overseas Development Natural Resources Institute (ODNRI)
56/62 Grays Inn Road
London WC1X 8LU, England

ATTN: Dr. R. V. Harris

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ODNRI/CAMEROON:**

OBJECTIVES OF PROJECT:	To increase income from agricultural production of oil seeds by establishing a soap-manufacturing industry that uses improved oil processing technology.
COLLABORATING AGENCY	Associated Country Women of the World
LOCATION OF PROJECT:	Ekona Institute of Agricultural Research, Cameroon
CONTACT PERSON:	Dr. S. W. Head
TYPE OF OIL BEING PROCESSED:	Palm kernel
TECHNOLOGY BEING USED:	Small-scale expeller "Cold process" Soap manufacture
STAGE OF PROJECT:	Training is being conducted in the use of the expeller and techniques of soap manufacture.
DIFFICULTIES ENCOUNTERED:	The equipment was originally purchased for sunflower seed processing and had to be modified when the program revised its original plan, finding that palm kernel processing for soap manufacture was more economically feasible than processing sunflower seed.

ODNRI/CAMEROON IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** comparison of ODNRI's group experiences with those of other programs.
- Organization for Production:** others' experiences with the "cash crop to food crop" strategy. (In ODNRI's experience, introducing new technology can often stimulate oil seed production.)
- Technologies of Processing:** manual expelling methods.
- Community or Beneficiary Involvement:** identifying sites and organizations interested in managing small-scale oil seed processing ventures.

ASSISTANCE ODNRI/CAMEROON CAN PROVIDE TO OTHERS:

Offers assistance in all aspects of oil seed processing. Has published a number of pamphlets on its experience in the field and on technologies it has developed. Publications are available to interested parties.

MALAWI

Overseas Development Natural Resources Institute (ODNRI)
56/62 Grays Inn Road
London WC1X 8LU, England

ATTN: Dr. R. V. Harris

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ODNRI/MALAWI:**

OBJECTIVES OF PROJECT: To make production of macadamia nut confectionery more efficient and profitable by extracting oil from reject macadamia nuts and using it to fry the nuts used for the confectionery. The spent oil from frying is then used in soap manufacture

LOCATION OF PROJECT: Naming 'Omba Estate, Thyolo, Malawi

TYPE OF OIL BEING PROCESSED: Macadamia

TECHNOLOGY BEING USED: Small-scale expeller

STAGE OF PROJECT: Process and technology is being routinely used.

ODNRI/MALAWI IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** comparison of ODNRI's group experiences with those of other programs.
- Organization for Production:** others' experiences with the "cash crop to food crop" strategy. (In ODNRI's experience, introducing new technology can often stimulate oil seed production.)
- Technologies of Processing:** manual expelling methods.
- Community or Beneficiary Involvement:** identifying sites and organizations interested in managing small-scale oil seed processing ventures.

ASSISTANCE ODNRI/MALAWI CAN PROVIDE TO OTHERS:

Offers assistance in all aspects of oil seed processing. Has published a number of pamphlets on its experience in the field and on technologies it has developed. Publications are available to interested parties.

SUDAN

Overseas Development Natural Resources Institute (ODNRI)
56/62 Grays Inn Road
London WC1X 8LU, England

ATTN: Dr. R. V. Harris

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY ODNRI/SUDAN:

OBJECTIVES OF PROJECT:	To increase income and improve nutrition through the production and marketing of edible oils.
COLLABORATING AGENCY:	Local Equatorial Region Agricultural Program
LOCATION OF PROJECT:	Equatorial Region Agricultural Programme, Yei, Southern Sudan
CONTACT PERSONS:	Dr. S. W. Head, R. V. Harris
TYPE OF OIL BEING PROCESSED:	Peanut, Sunflower
TECHNOLOGY BEING USED:	Small-scale expeller Conditioner made locally from oil drum (charcoal fired)
STAGE OF PROJECT:	The project has been discontinued because of civil unrest.
DIFFICULTIES ENCOUNTERED:	Civil unrest forced discontinuation of the program. However, even if the program had continued, it may have proved economically unfeasible, as cheap oil is already available locally.

ODNRI/SUDAN IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** comparison of ODNRI's group experiences with those of other programs.
- Organization for Production:** others' experiences with the "cash crop to food crop" strategy. (In ODNRI's experience, introducing new technology can often stimulate oil seed production.)
- Technologies of Processing:** manual expelling methods.
- Community or Beneficiary Involvement:** identifying sites and organizations interested in managing small-scale oil seed processing ventures.

ASSISTANCE ODNRI/SUDAN CAN PROVIDE TO OTHERS:

Offers assistance in all aspects of oil seed processing. Has published a number of pamphlets on its experience in the field and on technologies it has developed. Publications are available to interested parties.

ZAMBIA

**Overseas Development Natural Resources Institute (ODNRI)
56/62 Grays Inn Road
London WC1X 8LU, England**

ATTN: Dr. R. V. Harris

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ODNRI/ZAMBIA:**

OBJECTIVES OF PROJECT: To increase income of rural cooperatives and alleviate cooking oil shortages in rural areas by establishing an oil-expelling enterprise managed by the cooperatives.

COLLABORATING AGENCIES: Ministry of Agriculture
Ministry of Cooperatives
Rural Development Programs

LOCATION OF PROJECT: Central and Northern Provinces,
Zambia

CONTACT PERSONS: R. V. Harris, A. A. Swetman

TYPE OF OIL BEING PROCESSED: Sunflower

TECHNOLOGY BEING USED: Motorized Mini-40 expellers

STAGE OF PROJECT: ODNRI successfully transferred technology and demonstrated that an oil-expelling enterprise is economically feasible. Further work needs to be done in administrative training and institution building as well as in expansion of the program to other locations.

DIFFICULTIES ENCOUNTERED: Because sunflower is an annual crop, there are logistical and cash flow problems in the seed production and handling component of the program.

ODNRI/ZAMBIA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** comparison of ODNRI's group experiences with those of other programs.
- Organization for Production:** others' experiences with the "cash crop to food crop" strategy. (In ODNRI's experience, introducing new technology can often stimulate oil seed production.)
- Technologies of Processing:** manual expelling methods.
- Community or Beneficiary Involvement:** identifying sites and organizations interested in managing small-scale oil seed processing ventures.

ASSISTANCE ODNRI/ZAMBIA CAN PROVIDE TO OTHERS:

Offers assistance in all aspects of oil seed processing. Has published a number of pamphlets on its experience in the field and on technologies it has developed. Publications are available to interested parties.

ZIMBABWE

Overseas Development Natural Resources Institute (ODNRI)
56/62 Grays Inn Road
London WC1X 8LU, England

ATTN: Dr. R. V. Harris

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
ODNRI/ZIMBABWE:**

OBJECTIVES OF PROJECT: To make production of macadamia nut confectionery more efficient and profitable by extracting oil from reject macadamia nuts and using it to fry the nuts used for the confectionery. The spent oil from frying is then used in soap manufacture.

LOCATION OF PROJECT: Pecmac Nut Co., P.O. Box 3173
Paulington, Mutare, Zimbabwe

TYPE OF OIL BEING PROCESSED: Macadamia

TECHNOLOGY BEING USED: Small-scale expeller

STAGE OF PROJECT: Process and technology is being routinely used.

ODNRI/ZIMBABWE IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** comparison of ODNRI's group experiences with those of other programs.
- Organization for Production:** others' experiences with the "cash crop to food crop" strategy. (In ODNRI's experience, introducing new technology can often stimulate oil seed production.)
- Technologies of Processing:** manual expelling methods.
- Community or Beneficiary Involvement:** identifying sites and organizations interested in managing small-scale oil seed processing ventures.

ASSISTANCE ODNRI/ZIMBABWE CAN PROVIDE TO OTHERS:

Offers assistance in all aspects of oil seed processing. Has published a number of pamphlets on its experience in the field and on technologies it has developed. Publications are available to interested parties.

GHANA

Partners in Development
P.O. Box 9939
Accra, Ghana

ATTN: Dr. J. K. B. A. Ata

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
PARTNERS IN DEVELOPMENT:**

OBJECTIVES OF PROJECT: To create economic opportunities for rural communities by establishing a local commercial palm oil agriculture project.

COLLABORATING AGENCY: Peki Dzogbati Town Development Committee

LOCATION OF PROJECT: Peki, Dzogbati, Volta Region, Ghana

CONTACT PERSON: Mr. E. K. Tsiamé

TYPE OF OIL BEING PROCESSED: Palm

STAGE OF PROJECT: Community is nursing for-sale palm seedlings as well as planting seedlings for its own use. Oil manufacture will be introduced in three to four years when seedlings reach maturity.

PARTNERS IN DEVELOPMENT IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: methods for organizing and facilitating working committees

Technologies of Processing: technologies appropriate to the village level.

Marketing & Economic Issues: consumer tastes; preferences for traditional foods.

Community or Beneficiary Involvement: strategies for dealing with unpaid community time and service. Indirect effects of project on community members.

Role of Women: effects of other programs on relationships between women and work load.

ASSISTANCE PARTNERS IN DEVELOPMENT CAN PROVIDE TO OTHERS:

Can provide staff and technical assistance in design of surveys and assessment studies, and in the analysis of data.

UGANDA

Ms. Elizabeth Paterson
P.O. Box 23
Rukungir, Uganda

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY ELIZABETH PATERSON:

OBJECTIVES OF PROJECT: To improve nutrition of rural population by increasing oils and fats in diet.

LOCATION OF PROJECT: Uganda

TYPE OF OIL TO BE PROCESSED: Sunflower, peanut, castor oil

STAGE OF PROJECT: The program is in an early planning stage.

MS. PATERSON IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Technologies of Processing: simple, small-scale oil processing technologies appropriate for very rural areas. Methods for training women with very little technological background.

Role of Women: ways to insure that women and their families benefit by any intervention and ways of guaranteeing that women remain in control of the enterprise when and if it becomes successful.

CENTRAL AFRICAN REPUBLIC

**Post Harvest Food Systems Project
B.P. 506
Bangui
Central African Republic**

ATTN: Alan Miller

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
POST HARVEST FOOD SYSTEMS:**

OBJECTIVES OF PROJECT: To reduce postharvest food losses and increase food processing efficiency with use of improved technologies in order to increase the incomes of rural women.

COLLABORATING AGENCIES: Field extension workers
Previous UNDP involvement
Volunteers in Technical Assistance (VITA)

LOCATION OF PROJECT: Central African Republic

TYPE OF OIL BEING PROCESSED: Peanut, shea

TECHNOLOGY BEING USED: Peanut grinder
GTZ mill
Manual extraction methods

STAGE OF PROJECT: The best available peanut grinder has been identified and training has been conducted on use and maintenance for all new grinder owners and field extension workers.
Mechanized equipment and traditional methods of oil extraction have been compared, concluding that the traditional methods are more efficient in terms of relative oil output and cost.
More efficient hand extraction methods in other areas in order to determine if local women are

willing or interested in trying new processing techniques. Further work has to be done in evaluating training and extension methods in order to increase effectiveness of training.

DIFFICULTIES ENCOUNTERED: Extremely low resource base and small population of villages restricts possible technology options.

POST HARVEST FOOD SYSTEMS IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways other programs have organized women.
- Organization for Production:** village organization structures; issues regarding women producers.
- Technologies of Processing:** use and maintenance issues; training approaches.
- Marketing & Economic Issues:** methods for organizing women in marketing. Ways of providing subsidy and credit for the purchasing of equipment.

ASSISTANCE POST HARVEST FOOD SYSTEMS CAN PROVIDE TO OTHERS:

VITA/United States publishes a directory of volunteers with oil processing expertise, reviews technologies, and maintains project design information. Directory and information available from VITA at the following address:

Volunteers in Technical Assistance (VITA)
1815 North Lynn Street
Suite 200
Arlington, Virginia 22209-8438, United States

Projet Karite
B.P. 100
Bamako, Mali

ATTN: Mr. Dramane Sogoba

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
FROJET KARITE:**

OBJECTIVES OF PROJECT: To fabricate and disseminate processing equipment, to provide after-sales service and support.

COLLABORATING AGENCIES: Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ)
Division du Machinisme Agricole (DMA)
agencies purchasing/distributing presses such as CMDT and CECI, among others.

LOCATION OF PROJECT: Mali

TYPE OF OIL BEING PROCESSED: Shea

TECHNOLOGY BEING USED: Hydraulic 30-ton press
Improved roasting oven
Separator to help release the pressed cake from the press cage

STAGE OF PROJECT: GTZ originated the project in 1981, handing it over in 1989 to the newly created Malian NGO, Project Karite. A fabrication facility in Mali produces the equipment, except the hydraulic jack. Sixty presses have been installed in villages and training has been conducted in press use and maintenance. Three rural workshops were set up for repairs and maintenance.

DIFFICULTIES ENCOUNTERED: The equipment is not fully utilized when requirements for the successful transfer of technology are not respected in terms of women's group development, training, and market conditions. The jack remains the one component requiring regular repair and/or replacement.

PROJET KARITE IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation that reinforce Projet Karite capacities for delivering dependable processing equipment and after-sales services to rural women's groups.

ASSISTANCE PROJET KARITE CAN PROVIDE TO OTHERS:

With GTZ, has written a manual (125 pages, illustrated) on the use of its press. Manual is available for 2,000 F CFA (40 FF). The karite processing equipment also available for purchase. Will sell equipment for use by women only if specific conditions for group preparation, training, and equipment maintenance are met.

NIGERIA

RTS, P/Way
Civil Eng. Dept.
NRC
Zaria, Nigeria

ATTN: Teddy Uzochukwu

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
RTS, P/WAY:**

OBJECTIVES OF PROJECT: To provide low-cost food oil to Nigerian consumers through the organization and development of a food oils processing industry

LOCATION OF PROJECT: Amoli, Awyu Local Government Area, Anambra State, Nigeria

TYPE OF OIL TO BE PROCESSED: Palm

TECHNOLOGY TO BE USED: Traditional methods

STAGE OF PROJECT: The program is in the beginning design phase.

**RTS, P/WAY IS INTERESTED IN INFORMATION ON THE
FOLLOWING TOPICS:**

All aspects of program design and implementation that can help RTS, P/Way plan its program.

ASSISTANCE RTS, P/WAY CAN PROVIDE TO OTHERS:

Offers help in planning, implementing, and assessing projects.

WEST AFRICAN COUNTRIES

Prof. Dr Antoni Rutkowski
Marszalkowska 9/15 m 32
00-626
Warszawa, Poland

ATTN: Prof. Dr Antoni Rutkowski

PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY DR. ANTONI RUTKOWSKI:

OBJECTIVES OF PROJECT: To reduce work and increase income of rural oil producers by developing and introducing appropriate technologies.

LOCATION OF ACTIVITIES: West African countries

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Simple equipment appropriate for rural conditions

STAGE OF PROJECT: Samples of the equipment need to be constructed.

DR. RUTKOWSKI IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

All aspects of program design and implementation, with special emphasis on technologies and program methodologies, including evaluation techniques.

ASSISTANCE DR. RUTKOWSKI CAN PROVIDE TO OTHERS:

Is an expert on simple technologies appropriate to rural areas. Offers her services as a consultant.

MALAWI

Save the Children
P.O. Box 30374
Lilongwe 3, Malawi

ATTN: Jacques Wilmore

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
SAVE THE CHILDREN:**

OBJECTIVES OF PROJECT: To promote oil processing in rural villages to improve nutrition and create a new source of income for rural women.

COLLABORATING AGENCIES: Women in Development coordinator
Governmental related bodies

LOCATION OF PROJECT: Mkhota RGC, Central Region, Malawi

CONTACT PERSON: Mr. Frank Mlotchawa

TYPE OF OIL BEING PROCESSED: Peanut

TECHNOLOGY BEING USED: Locally made oil-pressing mortar
Locally made oil-processing sheller

STAGE OF PROJECT: Oil is being processed and marketed. Save the Children is looking at ways to improve the technology while, at the same time, keeping it simple so that it can continue to be manufactured and used at the village level.

DIFFICULTIES ENCOUNTERED: Because the processing methods now being used are laborious and time consuming, the oil being produced is not cheaper than industrially fabricated oil. The program recognizes that it will have to upgrade its technology in order to successfully compete in the marketplace.

SAVE THE CHILDREN IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Technologies of Processing: technologies that can be used and constructed at the village level, particularly technologies using animal-driven power.

Marketing & Economic Issues: identification and development of markets.

ASSISTANCE SAVE THE CHILDREN CAN PROVIDE TO OTHERS:

Will share its experiences and information with other interested agencies.

SENEGAL

SOS Sahel International
B.P. 5220
Dakar, Senegal

ATTN: Edouard Camille Basse

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
SOS SAHEL INTERNATIONAL:**

OBJECTIVES OF PROJECT:	To introduce local manufacture of peanut oil.
LOCATION OF PROJECT:	Region of Thies, Senegal
CONTACT PERSON:	Emanuel Mbaye Gning
TYPE OF OIL TO BE PROCESSED:	Peanut
STAGE OF PROJECT:	Project is in the planning stage
DIFFICULTIES ENCOUNTERED:	Lack of information and knowledge of where to find it has hampered program progress.

**SOS SAHEL INTERNATIONAL IS INTERESTED IN INFORMATION ON
THE FOLLOWING TOPICS:**

All aspects of program design and implementation that help SOS Sahel plan its program.

TOGO

**Sotoproder
B.P. 10061
Lome, Togo**

ATTN: Steven R. Brown

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
SOTOPRODER:**

OBJECTIVES OF PROJECT: To provide income for members of a women's cooperative by extraction of oil from palm kernels, using improved technology and an improved method of refining that produces a higher quality oil.

COLLABORATING AGENCY: Government Agent of Social Affairs

LOCATION OF PROJECT: Gape, Prefecture de Zio, Maritime Region, Togo

CONTACT PERSON: Mr. George Kuakuvi

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Diesel-powered kernel cracker
Diesel-powered grinder
Improved wood stove

STAGE OF PROJECT: The cooperative is successfully processing oil. Further assistance is needed in self-management and administration of the program.

DIFFICULTIES ENCOUNTERED: The price of edible oils dropped in Togo, making it uneconomical to produce higher-quality oil that has a lower yield. The cooperative is storing the oil, waiting for a better price.

ASSISTANCE SOTOPRODER CAN PROVIDE TO OTHERS:

Will work with others in Togo.

GHANA

Tamne Irrigation Farmer's Association
P.O. Box 5091
Accra-North, Ghana

ATTN: Elias B. Ayeebo

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
TAMNE IRRIGATION FARMER'S ASSOCIATION:**

OBJECTIVES OF PROJECT: To upgrade traditional methods of processing shea and develop new uses for the oil in order to expand production and increase income.

COLLABORATING AGENCIES: National Council for Women and Development
Department of Cooperatives

LOCATION OF PROJECT: Kaad-Atuba twin farming villages, the Bawku District, Ghana

TYPE OF OIL BEING PROCESSED: Shea

TECHNOLOGY BEING USED: Traditional methods

STAGE OF PROJECT: Shea butter is being produced as a cottage industry.

DIFFICULTIES ENCOUNTERED: The traditional methods currently being used are time consuming and laborious.

TAMNE IRRIGATION FARMER'S ASSOCIATION IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

Organization for Production: management issues.

Technologies of Processing: identification of labor-saving technologies.

Marketing & Economic Issues: identification of outlets for sale; viability and supply/demand issues.

ASSISTANCE TAMNE IRRIGATION FARMER'S ASSOCIATION CAN PROVIDE OTHERS:

Can advise on processing shea butter oil by traditional methods.

GHANA

Technology Consultancy Centre
University of Science and Technology
Kumasi, Ghana

ATTN: Peter Donkor

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
TECHNOLOGY CONSULTANCY CENTRE:**

OBJECTIVES OF PROJECT: To upgrade the traditional methods of extraction through the development of new technologies.

TYPE OF OIL BEING PROCESSED: Palm, shea, peanut, coconut, palm kernel

TECHNOLOGY BEING DEVELOPED: Manual hydraulic press
Screw press

STAGE OF PROJECT: Design and construction of a palm oil mill has been completed. Prototype hydraulic press for shea, peanut, coconut, and palm kernel is in advanced stage of development.

**TECHNOLOGY CONSULTANCY CENTRE IS INTERESTED IN
INFORMATION ON THE FOLLOWING TOPICS:**

Technologies of Processing: other technologies that have been successfully developed and transferred.

**ASSISTANCE TECHNOLOGY CONSULTANCY CENTRE CAN PROVIDE
TO OTHERS:**

Will make advisory visits to other agencies interested in use of Technology Consultancy Centre tested technologies.

GHANA

Technoserve
P.O. Box 135
Accra, Ghana

ATTN: Paul Warmka

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
TECHNOSERVE/GHANA:**

OBJECTIVES OF PROJECT: To establish a network of viable and self-sustaining cooperatively owned palm oil processing plants, thereby creating employment opportunities and income for rural residents.

COLLABORATING AGENCIES: Pew Memorial Trust
IBM
United Methodist Committee on Relief

LOCATION OF PROJECTS: Ntinanko Village, Amanse District,
Ashanti Region, Ghana
Prestea Village, Takwa District, Western
Region, Ghana

TYPE OF OIL BEING PROCESSED: Palm

TECHNOLOGY BEING USED: Locally manufactured diesel-driven
pounder
Hydraulic press
Batch type boiling and clarifying
tanks
Mechanical thresher
Electric blower
Kernel cracker

STAGE OF PROJECT: Two plants are currently operating
(Prestea 12 tons/day, Ntinanko 3
tons/day). Technoserve is working on
ways to increase productivity and
improve participatory financial and
administrative management systems to
prepare local staff/membership for

Technoserve's eventual withdrawal from the program. New projects are undergoing selection process.

DIFFICULTIES ENCOUNTERED:

There is a lack of reliable production data and specifications on locally manufactured equipment. Access to credit is limited.

TECHNOSERVE/GHANA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies: methods for accessing local sources of credit.
- Organization for Production: norms for labor productivity.
- Technologies of Processing: methods of insuring and improving product quality. Technologies for small-scale kernel oil production.
- Marketing & Economic Issues: places to find relevant information.
- Role of Women: impact of technological intervention on women in other projects.
- Impact of Government Policies: effect of government on palm sector.

ASSISTANCE TECHNOSERVE/GHANA CAN PROVIDE TO OTHERS:

Will assist others in replicating the Ntinanko/Prestea model. Proposals considered on an individual basis.

Is conducting an impact evaluation on the effect factory activities may have on manual processors. Will make evaluation available to other interested parties.

RWANDA

Technoserve
B.P. 419
Kigali, Rwanda

ATTN: Gregory B. Kruse

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
TECHNOSERVE/RWANDA:**

- OBJECTIVES OF PROJECT:** To increase rural economic opportunities and improve nutrition by providing locally produced low-cost cooking oil, using improved seed varieties and appropriate technology.
- COLLABORATING AGENCIES:** Abiyunze Cooperative Union
Sopagri, a family-owned business
Catholic Relief Services
Appropriate Technology International
CARE
Themis Farm Equipment Engineering Co. Ltd. of Tanzania.
Informal assistance from the Ministries of Agriculture and Industry
- LOCATION OF PROJECT:** Eastern Rwanda, near Rusumo
- TYPE OF OIL BEING PROCESSED:** Sunflower
- TECHNOLOGY BEING USED:** UNATA spindle press
- STAGE OF PROJECT:** Feasibility study has been completed. Improved seed and assorted technology, as well as a pilot project site and beneficiaries, have been identified.
- DIFFICULTIES ENCOUNTERED:** Scarcity of land available for commercial production of sunflower. Access to credit is very difficult. Problems with the reliability and performance of available equipment.

TECHNOSERVE/RWANDA IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** ways to achieve viable independent small-scale oil processing enterprises.
- Organization for Production:** methods for minimizing bird damage on small plots of sunflower. Workable systems for contracting with small landholders.
- Technologies of Processing:** different technologies for pressing, refining, and storing sunflower seed oil and similar oils.
- Marketing & Economic Issues:** packaging, bulk sales, quality control, toxicity risks, treatment of oil cake. Other uses for seed oil such as soap manufacture.
- Community or Beneficiary Involvement:** case studies on cooperative enterprises.
- Role of Women:** experience of women in other programs.
- Impact of Government Policies:** strategies for working with government to improve the policy environment.

ASSISTANCE TECHNOSERVE/RWANDA CAN PROVIDE TO OTHERS:

Will share with interested parties its experience, in importing both seeds and technology from other countries, and its method of analysis.

KENYA

University of Nairobi/Chiromo Campus
Faculty of Science
P.O. Box 14036
Nairobi, Kenya

ATTN: Prof. Raphael M. Munavu

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
UNIVERSITY OF NAIROBI/CHIROMO CAMPUS:**

- OBJECTIVES OF PROJECT:** To introduce vegetable food oil cultivation and processing in semi-arid regions of Kenya, thereby increasing incomes of rural farmers.
- COLLABORATING AGENCIES:** ADC and National Youth Service Stations (e.g., Yatta)
- LOCATION OF PROJECT:** Kenya
- TYPE OF OIL BEING PROCESSED:** Safflower, jojoba
- TECHNOLOGY BEING USED:** Conventional screw press
- STAGE OF PROJECT:** The univeristy has demonstrated, by successful trial plantings, that safflower does well in low-rainfall areas. Oil has been successfully extracted from safflower seeds using conventional screw presses. Researchers are now seeking ways to extend safflower cultivation and improve harvesting methods.
- DIFFICULTIES ENCOUNTERED:** There has been a lack of interest in cultivation because benefits are long term and harvesting and threshing require learning new technologies and techniques.

UNIVERSITY OF NAIROBI/CHIROMO CAMPUS IS INTERESTED IN INFORMATION ON THE FOLLOWING TOPICS:

- Project Design Strategies:** strategies for introducing new crops and technologies.
- Organization for Production:** methods for supervising cultivation and harvesting procedures. Methods for training in data collection and information management.
- Technologies of Processing:** availability and efficiency of small-scale, diesel engine powered presses.
- Marketing & Economic Issues:** export opportunities; product marketability concerns such as packaging and quality control.
- Community or Beneficiary Involvement:** methods for encouraging group participation in processing and marketing.
- Role of Women:** ways to increase the role of women in project design and implementation.
- Impact of Government Policies:** government export promotion activities, taxation, and provision of credit.

ASSISTANCE UNIVERSITY OF NAIROBI/CHIROMO CAMPUS CAN PROVIDE TO OTHERS:

Offers to help others assess projects and choose appropriate seed oils for specific regions.

GHANA

University of Science and Technology
Chemical Engineering Department
Kumasi, Ghana

ATTN: George Afrane

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
UNIVERSITY OF SCIENCE AND TECHNOLOGY:**

OBJECTIVES OF PROJECT:	To research the feasibility of extracting some local oils with solvents; to construct a pilot plant based on the research results.
TYPE OF OILS BEING RESEARCHED:	Palm kernel, palm, peanut, tigernut
TECHNOLOGY BEING RESEARCHED:	Solvent extraction
STAGE OF PROJECT:	Project is in the early stages of research.

**UNIVERSITY OF SCIENCE AND TECHNOLOGY IS INTERESTED IN
INFORMATION ON THE FOLLOWING TOPICS:**

Project Design Strategies:	source of parameters employed in the design of other food oil programs.
Organization for Production:	sources of raw materials, types of materials used, etc., in other programs.
Technologies of Processing:	technologies being used, including energy requirements.

**ASSISTANCE UNIVERSITY OF SCIENCE AND TECHNOLOGY CAN
PROVIDE TO OTHERS:**

Will share the results of its research.

KENYA

Worldview International Foundation
Indigenous Food Plan Program
P.O. Box 48108
Nairobi, Kenya

ATTN: Joseph A. Kuhn

**PROFILE OF THE PROJECT AND/OR ACTIVITIES CONDUCTED BY
WORLDVIEW INTERNATIONAL FOUNDATION:**

- OBJECTIVES OF PROJECT:** To compile and disseminate information on indigenous food plant resources and their use in Kenya. To investigate gathering, propagation, processing and storage techniques. To extend knowledge of nutritional values.
- COLLABORATING AGENCIES:** Kenya Freedom from Hunger Council
National Museums of Kenya
- LOCATION OF PROJECT:** Eight districts in Kenya
- STAGE OF PROJECT:** The project is in the early stages of implementation.

**WORLDVIEW INTERNATIONAL FOUNDATION IS INTERESTED IN
INFORMATION ON THE FOLLOWING TOPICS:**

- Technologies of Processing:** cultivation and processing techniques relative to species or other groupings.

**ASSISTANCE WORLDVIEW INTERNATIONAL FOUNDATION CAN
PROVIDE TO OTHERS:**

After program is underway and beginning to show results, will be able to provide plant species information, including processing techniques and storage.

INDEX BY COOPERATIVES:

The following agencies indicated that they help establish and/or assist food oils cooperatives or are interested in community ownership/management issues.

Agricultural Extension Research Liaison Service (AERLS)/Nigeria	11
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Evans Developers, Inc./Ghana	57
Experiment in International Living (EIL)/Uganda	59
Femme Developpement et Entreprise en Afrique/Senegal	61
Institute of Agricultural Research and Training (IAR & T)/Nigeria	81
Mbungo Farming Cooperative/Zimbabwe	89
Overseas Development Natural Resources Institute/Zambia	105
Projet Karite/Mali	115
Sotoproder/Togo	125
Technoserve/Ghana	131

INDEX BY COUNTRY:

The following agencies or individuals have indicated that they are involved with food oils processing in Africa. They are grouped by the country in which they are working or have worked.

CAMEROON

Appropriate Technology International (ATI)	15
Mr. Carl Bielenberg	23
National Center of Agricultural Mechanization	95
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CENTRAL AFRICAN REPUBLIC	
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Holy Family Hospital	71
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National Service Secretariat	95
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Tamne Irrigation Farmer's Association	127
Technology Consultancy Centre	129
Technoserve	131
University of Science and Technology	137
GUINEA-BISSAU	
Evangelical Mission Guinea-Bissau	55
KENYA	
Care	29
Christian Children's Fund	45
Gichiche Primary School, 4-K Club	67
Kenya Energy and Environment Organizations (KENGO)	87
University of Nairobi	135
Worldview International Foundation	139
LESOTHO	
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MOROCCO	
IAV. Hassan II	75
NIGERIA	
Adamu Data	7
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Bayero University	21
Institute of Agricultural Research and Training (IAR & T)	81
International Institute of Tropical Agriculture	83
RTS, P/Way	117
RWANDA	
Catholic Relief Services	35
Technoserve	133
SENEGAL	
Association Senegalaise des Amis de la Nature Environment and Development Action in the Third World (ENDA)	19
Femme Developpement et Entreprise en Afrique	51
Institut de Technologie Alimentaire	61
SOS Sahel International	79
	123
SIERRA LEONE	
CWASRO	49
SUDAN	
Overseas Development Natural Resources Institute	103

TANZANIA	
Appropriate Technology International (ATI)	17
Mr. Carl Bielenberg	23
Bunda Catholic Church	25
CAMARTEC	27
Evangelical Lutheran Church of Tanzania	53
Mr. Ismail Mwassa	91

TOGO	
Conseils Gestion Afrique Togo/Initiatives des Communautes de Base (CONGAT/ICB)	47
Sotoproder	125

UGANDA	
Experiment in International Living (EIL)	59
Ms. Elizabeth Paterson	111

ZAMBIA	
Human Settlements of Zambia	73
Overseas Development Natural Resources Institute	105

ZIMBABWE	
Chitepo Agriculture Training Centre (CATC)	41
Mbungo Farming Cooperative	89
Organisation of Rural Associations for Progress (ORAP)	97
Overseas Development Natural Resources Institute	107

INDEX BY CROP DEVELOPMENT:

The agencies listed below are involved in some way with the horticultural aspects of oils crops: through promotion of selected seed varieties or other kinds of extension work, protection of semi wild trees, plant propagation, or other crop development efforts.

Appropriate Technology International (ATI)/Cameroon	15
Appropriate Technology International (ATI)/Tanzania	17
Bunda Catholic Church/Tanzania	25
Catholic Relief Services/Gambia	33
Catholic Relief Services/Rwanda	35

Christian Children's Fund, Inc./Gambia	43
Evangelical Lutheran Church of Tanzania	53
Forces of Light/Ghana	63
Gichiche Primary School, 4-K Club/Kenya	65
Holy Family Hospital/Ghana	71
Mbungo Farming Cooperative/Zimbabwe	89
Partners in Development/Ghana	109
Tamne Irrigation Farmer's Association/Ghana	127
Technoserve/Rwanda	133
University of Nairobi/Chiromo Campus/Kenya	135

INDEX BY DATA BANK:

These agencies have indicated they are setting-up data banks on topics related to food oils processing.

Adamu Data/Nigeria	7
Institut de Recherche pour les Huiles et Oleagineux	77
Organisation of Rural Associations for Progress (ORAP)/Zimbabwe	97
Worldview International Foundation/Kenya	139

INDEX BY OILS:

Almost all agencies in the directory indicated the specific type of oil or oils they are processing or researching. Some projects are concerned with several oils and so are listed several times below.

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I.A.V. Hassan II/Morocco	75
CASTOR	
Ms. Elizabeth Paterson/Uganda	111

COCONUT

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Mr. Carl Bielenberg/Tanzania & Cameroon	23
Care/Kenya	29
Ghana Organisation of Volunteer Assistance (GOVA)	65
Institut de Recherche pour les Huiles et Oleagineux	77
ISSER/Ghana	85
Mr. Ismail Mwassa/Tanzania	91
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JOJOBA

University of Nairobi/Chiromo Campus/Kenya	135
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MACADAMIA

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MAIZE

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Bayero University/Nigeria	21

MASAMBU

Bayero University/Nigeria	21
Mr. Ismail Mwassa/Tanzania	91

OLIVE

Bayero University/Nigeria	21
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Association Senegalaise des Amis de la Nature/Senegal	19
Bayero University/Nigeria	21
Mr. Carl Bielenberg/Tanzania & Cameroon	23

Christian Children's Fund, Inc./Gambia	43
Conseils Gestion Afrique Togo/Initiatives des Communautes de Base (CONGAT/ICB)/Togo	47
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Environment and Development in the Third World (ENDA)/Senegal	51
Evangelical Mission Guinea-Bissau	55
Forces of Light/Ghana	63
Ghana Organisation of Volunteer Assistance (GOVA)	65
Institut de Recherche pour les Huiles et Oleagineux ISSER/Ghana	77
Mr. Ismail Mwassa/Tanzania	85
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PALM KERNEL

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Environment and Development in the Third World (ENDA)/Senegal	51
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Institut de Technologie Alimentaire/Senegal	79
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SAFFLOWER	
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SESAME	
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Catholic Relief Services/Gambia	33
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SHEA

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SOYA

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SUNFLOWER

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Evangelical Lutheran Church of Tanzania/Tanzania	53
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Bayero University/Nigeria	21
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INDEX BY PUBLICATIONS:

The following agencies have published documentation on oils processing. The publications are available from them directly, usually gratis or at nominal cost.

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Appropriate Technology International (ATI)/Tanzania	17
Care/Kenya	29
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Institut de Recherche pour les Huiles et Oleagineux/France	77
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INDEX BY RESEARCH:

Agencies listed below used the term "research" to describe their projects and/or indicated that they are involved in design, testing, development, study, and other research-oriented activities.

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INDEX BY SOAP MAKING:

Soap making is one of the major non-food uses of edible oils and was mentioned by these agencies as being part of their activities or future plans.

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Human Settlements of Zambia	73
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INDEX BY TECHNOLOGY LEVEL:

We have attempted to categorize projects according to the level and/or type of technology being used: Animal Traction, Manual (human), Power (electric, diesel or gasoline engines), Solvent Extraction, and Traditional. Some projects are using or experimenting with several different processing methods and so are listed several times.

ANIMAL TRACTION

IAV. Hassan II/Morocco 75

MANUAL TECHNOLOGY

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TRADITIONAL TECHNOLOGY

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