

Nkenge Commercial Farming Pilot Project:

Promoting Women's Economic Development & Empowerment

A Business Incubation Project sponsored by the Women's Global Connection

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**NKENGE COMMERCIAL FARMING PILOT PROJECT:
PROMOTING WOMEN'S ECONOMIC DEVELOPMENT AND EMPOWERMENT
Bukoba, Kagera Region, Tanzania, East Africa**

1. EXECUTIVE SUMMARY

In 2003, the **WOMEN'S GLOBAL CONNECTION (WGC)** initiated collaboration with the **SAINT CECILIA WOMEN'S GROUP (SCWG)**, a women's cooperative founded in 1996 by eight women from Bukoba, Tanzania. The group originated from the need to tackle poverty, which has been rampant since the country's adhesion to the Structural Adjustment Programs (SAPs) created by the World Bank and International Monetary Fund (IMF) in the early 1980's. The national government and foreign donors have since then encouraged women to combine efforts by forming economic groups so they can be recognized and eligible for grants, training, and other initiatives. Tanzania has also faced great devastation due to the high incidence of HIV/AIDS among its population, creating negative impact on accessibility and allocation of human resources in the country. A peaceful and stable environment has, on the other hand, helped to create an attractive environment for investors and contributed to the implementation of projects in the areas of agriculture and technology.

Three years of collaboration between the SCWG and the WGC led to the strengthening of the leadership skills of the women in Bukoba, improvement of the SCWG's organizational capacity, development of basic computer and Internet skills, as well as the growth of the group's membership and outreach. The experience inspired the SCWG to create a new organization aimed at helping more local women to develop small businesses enterprises through the support of small grants from the United States and profits the organization in Bukoba made with the sale of handicrafts and farming products. The **BUKOPA WOMEN'S EMPOWERMENT ASSOCIATION (BUWEA)** was founded and registered as a community-based organization (CBO) in July 2005 and it has since then provided small grants and business advice and training to women living in the rural areas of Bukoba. The organization's strategy was to encourage women to form economic groups so they could leverage their capacity to mobilize human, financial, and natural resources at the local and international level by working collaboratively. BUWEA has also taken any opportunities to promote the education of women on health issues, family planning, women's rights, technology, basic business skills development, and women's leadership. The main economic activities the organization has been supporting are small-scale farming (beans, maize, and soybeans), animal rearing (pigs, poultry, cattle, and goats), and handicraft making.

In order to support the organization's endeavor, BUWEA created a revolving loan fund through which small loans are distributed monthly. The amount disbursed to a woman is on average 50.00 USD. The borrower has three months to repay with an interest rate of 5% over the total amount borrowed. Resources to this fund come from the sale of handmade baskets in the United States, profits made from the sale of agricultural products, and the interest rate generated from the micro credit project.

The **NKENGE COMMERCIAL FARMING PROJECT** was initiated by the SCWG in 2004 when the organization acquired a 50 acres farm in Bukoba rural. The project is located in the Nkenge area, near Ngoni River in Kitobo Ward, Bukoba district. SCWG/BUWEA's goal is to promote commercial

farming among women by increasing cash crop production, helping also local women to develop business skills. BUWEA has worked in collaboration with experts from the United States to develop a soybeans incubation project that could be replicated among other members of the organization. The rationale for the pilot project was based on two main assumptions: identified deficiency in protein intake in the region, leading to the women's and children's illnesses; and great need to tackle poverty by providing women with income so they can meet basic necessities such as school fees, medicine, and food supplies. The organization has cultivated beans and maize to be sold in the local market. Its goal is to expand the current 10 acres cultivation to as many as 50 acres so they can increase the sale of their food crops and be able to generate more income. That will also increase the organization's ability to sponsor more women to start small businesses in the local community. Most of the BUWEA's members are engaged in small scale farming (Kibanja production system), where individual farmers practice organic farming and manage small plots to produce bananas, coffee, and season crops such as cassava, sweet potatoes, beans and maize.

2. COLLABORATIVE WORK: SCWG, WGC, BUWEA

Out of all the people living with HIV/AIDS (40.3 million), 64% (24.5 million) live in sub-Saharan Africa, where the population has surpassed one-tenth of the world's population (UNAIDS Global Report 2006). Almost nine in ten children younger than 15 years of age and three-quarters of all women 15 years and older living with HIV/AIDS, are in sub-Saharan Africa. In 2005, Tanzania was estimated to have 1,400,000 people living with HIV/AIDS. The estimated number for women was 710,000 (ages 15-49). 1,100,000 children (under 17 years of age) were estimated to have lost their mother or father or both parents to AIDS (UNAIDS 2006 Report on the Global AIDS Epidemic).

The high incidence of HIV/AIDS among women (17.5 million worldwide) is explained by the unequal social and socio-economic status of women and men. By being the 70% of the world's poor, women are left with fewer economic options. Women and girls in Africa face discrimination in terms of access to education, employment, credit, health care, land and inheritance. They are also responsible for caring for ill family members along with girls, who are in many cases ill themselves. The collapse of traditional family and support structures has contributed to the erosion of the status of women in many countries (Averting HIV and AIDS international charity, AVERT 2006).

The economic impact of AIDS in Tanzania can be assessed in terms of the great loss of labor supply. Since women occupy between 60% and 80% of the labor required for farming activities in a country where 80% of the population is engaged in agriculture – corresponding to 52% of the GDP –, any losses in labor supply due to AIDS become a food security problem. AIDS also affects the education sector by keeping children out of school if they are needed at home to care for sick family members or to work in the fields (Bollinger, Stover & Riwa, 1999). Children may also drop out of school if their families can not afford school fees due to reduced household income as a result of an AIDS death.

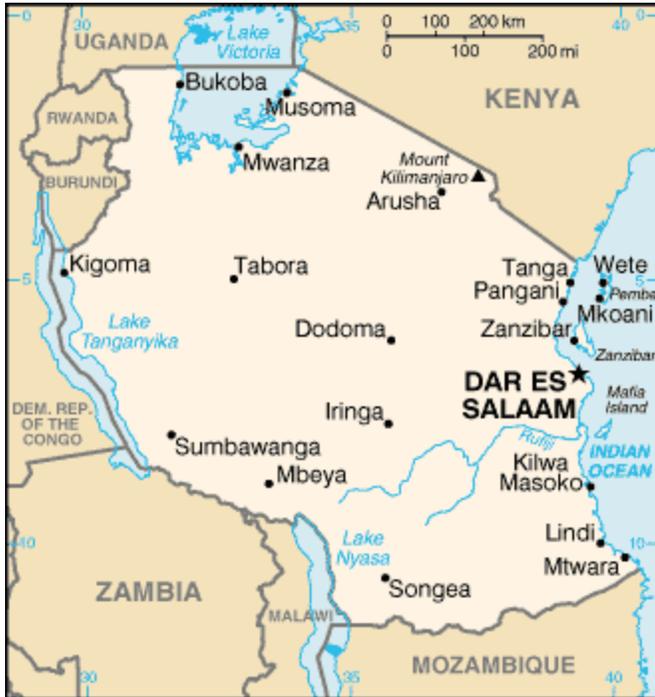
The socioeconomic and cultural context where the women in Bukoba live shows that support in at least two fronts are needed: a) financial support to promote initial development of agricultural projects that will integrate the use of technology including tractors, irrigation system, improved seeds, and fertilizers, in areas that have a potential for developing value-added products; and b) knowledge transfer to support the development of technical and organizational skills aiming at promoting increased cash crops yields and better use of local and external resources. BUWEA has articulated the local women's need to move from subsistence farming to commercial farming so they can ensure higher income to their families. The organization's ability to manage resources and to be accountable to partnering

organizations and individuals as well as to maintain a programmatic agenda will depend on gradual development and establishment of an organizational structure.

BUWEA has now approximately 130 members divided among 32 groups. The organization's board is formed by local women only who have some financial, managerial, and good communication skills in both English and Swahili. The group is currently developing Phase Two of the soybeans cultivation pilot project. In Phase Two the soil is cleared, ploughed and prepared for sowing. Even though BUWEA owns a 50 acres farm, the women's cooperative decided to limit cultivation of soybeans to 10 acres due to two main reasons: (a) the experimental nature of the initiative; and (b) adjustment to the funds received to sponsor the project. Once the soybeans cultivation pilot project reaches Phase Three and the women's cooperative is able to assess performance through their crop yields and sales in the local market, the group in partnership with individuals and institutions supporting the business incubation can build strategies to achieve increased crop yields by means of expanding cultivation from 10 to 20, 30, or 50 acres in the next season. Other groups and individuals have cultivated soybeans in the region in the past, creating a small and yet valuable source of indigenous and technical knowledge. The business incubation team sponsored by the Women's Global Connection is responsible for the provision of management guidance (budgeting, allocation of financial resources -- purchase of inputs including seeds, tools, pesticides and herbicides as well as managing expenses with transportation of workers and materials, tractor rental, irrigation, etc.), technical assistance (higher quality seeds, crop rotation for increased productivity, soil erosion control, tillage techniques, etc.), and consulting (uses of soybeans in the local population diets, nutritional information on health benefits of soybean consumption, marketing of produce, etc.). Management guidance, technical assistance, and consulting is not only provided by stakeholders in the United States but also by experts from Tanzania through a network captivated by the WGC. The organization also provided working capital for Phases 2 and 3 of the pilot project. BUWEA supervises service providers and workers, making arrangements and negotiating fees.

WGC's orientation has been to support BUWEA's development without intervening on its activities by utilizing a participatory approach through which the women define their needs and priorities. WGC has also played an important role in helping the women's cooperative in Bukoba to develop both a national and international network of collaborators in the areas of agriculture (horticulture extension officers, community leaders, and researchers), small businesses (entrepreneurs, trade fairs organizers, and researchers), information and communication technology (web-based organizations, computer instructors), and health sector (nutrition extension officers). WGC has also organized workshops in small businesses start-ups, business plan development, record keeping, product costs, basic computer skills, and it has developed simple tools that will become available in Swahili (Tanzania native language) through the WGC website and CD ROMs.

3. COUNTRY INFORMATION



Kagera Region is located in the northwestern corner of Tanzania. Bukoba, Kagera Region's capital, is a fast growing town with an attractive waterside setting. Situated on the shore of Lake Victoria, Bukoba lies only 1 degree south of the Equator and is Tanzania's second largest port on the lake. Kagera is comprised of five administrative districts: Bukoba, Muleba, Karagwe, Ngara and Biharamulo. The region neighbors Uganda, Rwanda and Burundi and lies across the lake from Kenya. This location makes Kagera a good place for business and a perfect stop for tourists traveling between any of these nations and Tanzania.

The main industrial activity in Kagera is agriculture, while the main commercial product is coffee, and the main food crops and dietary staple are matoke (large green bananas that are roasted or steamed), maize and beans. This is the mainstay of the Region, which accounts for 50% of the Region's Gross Domestic Product (GDP). Main crops are green bananas, coffee, beans, cotton, cassava and tea. Other crops include sugar, sweet potatoes, vegetables, millet, sorghum and paddy. Vanilla is a recent cash crop, which is being grown in Bukoba and Muleba Districts. Most inhabitants along the Lake Victoria undertake fishing activities as an economic activity. Dairy farming which started in and around Bukoba, has now spread throughout the Region with an estimated 6,000 heifers producing milk. Traditional livestock keeping is mostly practiced in Biharamulo and Karagwe Districts.

In Tanzania, financial services providers to the poor and low income people include licensed commercial banks, regional and rural unit banks, Savings and Credit Cooperative Societies (SACCOs), and several financial Non-Governmental Organization (NGOs), whose micro-credit delivery operations are funded and supported with technical assistance by international donors. The SACCOs and the NGOs are not subject to regulation. The SACCOs outreach to members and clients, resources generated from members in terms of share capital and savings, and the volume of loans outstanding to member-borrowers far exceed those for the NGOs. NGOs provide microfinance services to the poor and low income people in Tanzania. The NGOs are registered legal entities. The three largest microfinance NGOs are the Mennonite

Economic Development Association (MEDA), PRIDE-Tanzania, and the Presidential Trust Fund.

4. DEMONSTRATED NEED

Tanzania has 40 million ha of rain-fed arable land of which 6.2 million ha is actually cultivated. 80% of the land which is cultivated is worked using simple hand tools (hand hoe farming). Agriculture has been the backbone of the Tanzanian economy for almost the country's entire existence. Based on the National Census 2002, agriculture employs about 80 percent of the population (URT, 2002). The major economic activity in the Bukoba District is agriculture, which provides the people with cash income and food. The local population grows coffee and tea as cash crops, and bananas, maize, beans, cassava, sweet potatoes and yams for both food and cash income.

Literature shows that women in Africa carry the heaviest burden in terms of agricultural production. Women's primary responsibility is food production, and preparation and collection of fuel and water (United Nations Economic Commission for Africa, 1991). As farmers, women are responsible for substantial share of food crop production and a variety of other agricultural activities. Their decisions and activities have direct bearing on soil fertility and erosion, water infiltration and retention and waste and by-product recycling (Cleaver, 1994:73). The farming cycle has usually three labor peaks: plowing, planting, and weeding. In Tanzania, women do not have access to agricultural technology, implements, pesticides, and herbicides. Even when the technology is available, women cannot access financial resources (credit) and they are left with the most precarious tools for farming. Studies have shown the benefits of the use of animal-drawn implements for primary tillage (plowing), animal power in field activities, and rural transport equipments (carts and wheel barrows) among women. But only a minority is utilizing the animal-drawn implements.

BUWEA has identified the lack of technology as one of the major constraints barring the women from improving food production. As an organized group, their bargaining power and capacity to network have increased and generated opportunities for hiring a tractor, paying irrigation costs, and hiring and transporting workers. Ability to generate more income through the sale of their agricultural produces to be reinvested in the next planting season is essential for the group's self-sufficiency and expansion in terms of the number of women benefiting from their commercial farming project. Another constraint the women in Bukoba face is related to ownership rights. Traditionally, land ownership is based on kinship structures and is characterized by patrilineal ownership and inheritance. BUWEA with the support of the WGC acquired a 50 acres farm that is now being piloted through several collaborative initiatives to cultivate soybeans. That represents a great achievement to the women. Research has demonstrated that property rights raise women's status in the household as well as the community, and this translates in greater bargaining power. Control over the resource means that it is more likely to be managed in a way that is consistent with women's priority.

In order to strengthen the potential to promote commercial farming among local women, BUWEA needs to work in partnership with local and international organizations and individuals including the WGC, the local government, and agricultural officers and researchers, integrating a multi-disciplinary approach to support the group's development of managerial and technical skills, and financial capacity to expand the soybeans production pilot project. A successful incubation project would have a strong potential to be utilized as a module to other women's groups in the region who want to transit from

subsistence agriculture to commercial farming and who would need assistance to develop the necessary skills to accomplish their goal.

5. BUWEA OBJECTIVES

BUWEA has set six objectives to be achieved in a medium term plan of three years (2006-2008).

- To organize and manage BUWEA members engaged in commercial farming (1)
- To secure a fifty (50) acres arable land (2)
- To establish and maintain this land (3)
- To achieve maximum yield (i.e. 2000kg maize and 600kg beans per acre) (4)
- To minimize costs (Tshs 230,500/acre for maize, Tshs 97,200/acres for beans) (5)
- To maximize profits (Tshs 120,000/acre for maize and Tshs 22,800/acre for beans) (6)

The **NKENGE COMMERCIAL FARMING PROJECT** needs to achieve maximum yields at a minimum cost and maximum profit with the use of agricultural technologies and techniques. Collaboration with the WGC and other partnering organizations including the Sokoine University of Agriculture and the local government (extension officers) are *sine qua non* condition for the project success as corroborated by previous assessment of the local conditions and needs. Development of business skills (planning, marketing, sales, and finance) and improvement of technical knowledge in agriculture are crucial for the organization's stepping forward in terms of accomplishing the goals the women have set for themselves. WGC has played and it will continue to play an important role in creating links between the different resources (human and financial) available for the women's groups.

6. IDENTIFIED NEEDS

BUWEA has developed five objectives for the commercial farming project:

Objectives:

1. To encourage more local women to engage in commercial farming projects by helping them to identify local natural, human, economic, and technological resources (i.e. available quality land, local horticulture officers, micro-credit funders, more advanced agricultural techniques).
2. To ensure crop production every season.
3. To locate funds and supervise workers to assure properly care of the land and inputs (irrigation system).
4. To increase productivity through the implementation of better management techniques and new technologies.

Methods of increasing productivity the business incubation team have defined are listed below.

- Soil in the Bukoba area is not as fertile as it once was. Studies in the area have shown that using fertilizers can increase crop production by up to 30%.
- The ground must be worked very well before the crops are planted. Many areas of Tanzania are prone to drought. When it does rain, the rain runs off because the ground is so hard and compact and the water cannot penetrate. The group needs to hire the tractor in the Bukoba area to work the fields and ensure the ground is loosened very well before the crops are planted. Working the land allows rains to be absorbed into the ground making the moisture available for the crops.

Working the land and increasing moisture in the soil will also increase crop yields.

- The group needs to investigate the use of pesticides for insects, worms and diseases that invade crops. These diseases and pests can reduce productivity if they are not dealt with. Pesticides are available and should be used to prevent insects and diseases from ruining crops and reducing yields.
 - The group needs to increase the number of acres that it farms. They own 50 acres and are currently farming 10 acres. The group needs to put 10 additional acres into production each year until the full 50 acres is in production. Increasing the size of the farm will definitely increase revenues and production for the group.
 - Seed variety can also play a very big role in production. Many varieties of seed have been specifically developed for Tanzania. These varieties will perform well in the soil in the Bukoba area and will do better in dry climates. The group should try to plant certified seeds that are engineered for the Bukoba area. This seed is more expensive than uncertified seed, but it increases crop yields because these seeds are designed specifically to produce higher yields in the Bukoba area.
5. To promote their products in the already established business relationships (local market) and cultivate new relationships for opening opportunities in new markets.

7. WGC'S ROLES AND OBJECTIVES

WGC on its turn will utilize strategies to:

1. Perform a role as an enabling organization in the areas of local and external network (helping the women's organization to solidify relationships with the local government, researchers, funders, and any other resources);
2. Create business skills developmental models (toolkits, workshop trainings, and consulting);
3. Provide support in Information and Communication Technologies (use of computers and the Internet by the women in Bukoba for communication, project planning, accountability, production and publication of materials with relevant content for the rural women in Bukoba, promotion of cross-cultural knowledge exchange through the web).
4. Support the implementation of the soybeans cultivation pilot project.

8. OUTCOME MEASUREMENT'S FOR WGC

Outcome Measurement One: To evaluate the accomplishment of strategy one, WGC will:

- Map the number of partnering organizations and individuals working with BUWEA.

Outcome Measurement Two: completion of strategy two will be assessed through:

- Design and publication of two toolkits in record keeping and budgeting for the women's groups in Africa. Toolkits must be translated to the women's local language.
- Organization and delivery of one workshop for 40 participants from the rural area in Bukoba, Tanzania during Summer 07. The workshop will be on soy education: the various uses of soy in the local population's diet and soy preparation methods.
- Consultancy on proper soy cultivation methods provided by local government officers and researchers in at least two different occasions during implementation of soy beans cultivation pilot project.

Outcome Measurement Three: accomplishment of objective and strategy three will be assessed through:

- Training of five women in basic computer skills (Internet, typing documents in MSWord, preparation of annual and trimester budget using MSExcel, accessing, writing and sending e-mails, attaching documents and pictures, writing and posting messages in the WGC discussion groups) provided by WGC staff and/or volunteers during immersion trip in Summer 07.
- Assistance online to BUWEA management group by WGC staff on Internet and computer use during the year of 2007.
- Facilitation of one discussion group targeted at 20 participants from diverse cultural backgrounds in the interactive area of the WGC website.

Outcome Measurement Four: To evaluate the accomplishment of objective four, WGC will:

- Provide working capital for Phases 2 and 3 during the first year (Fall 2006/Spring 2007) of implementation of soy pilot project.
- Provide ongoing assistance in obtaining the financing necessary for the soybean cultivation pilot project growth.
- Offer capacity building workshops.
- Assess successful cultivation of 10 acres of soybeans.
- Assess the number of women benefiting from the production (consumption) and sale of soybeans (income generated that is going to be dispersed through the revolving loan fund).

8. ESTIMATE BUDGET FOR THE COMMERCIAL FARMING PROJECT

Pilot project for soybean cultivation				
1. Activities	Unit	Cost	Total	Total (50 acres)
1.1 Clearing the land	10 acres/50 acres	10	100	500
1.2 Tractor ploughing	10 acres/50 acres	40	400	2000
1.3 Tractor to harrow	10 acres/50 acres	40	400	2000
Subtotal			900 USD	4500 USD
2. Labor Charges	Unit	Cost	Total	Total (50 acres)
2.1 Manure application	10 acres/50 acres	15	150	500
2.2 Planting	10 acres/50 acres	10	100	500
2.3 Weeding	10 acres/50 acres	10	100	500
2.4 Harvesting	10 acres/50 acres	10	100	500
2.5 Consultation fee	10 acres/50 acres	10	250	250
2.6 Watchman for 2 months/2 men	2*2	50	200	200
Subtotal			900 USD	2450 USD
3. Other costs	Unit	Cost	Total	Total (50 acres)
3.1 Transportation		150	150	750
3.2 Manure	10 acres/50 acres	350	350	1750
3.3 Storage for two months	2/10		200	1000
3.4 Seeds	20 Kg/100 Kg	10	200	1000
Subtotal			900 USD	4500 USD
4. Irrigation Costs	Unit	Cost	Total	Total (50 acres)
4.1 Fuel	50 LT/250 LT		75	375
4.2 Water Pipes	4/20	25	100	500
4.3 Sprinklers	4/20	20	80	400
Subtotal			255 USD	1275 USD
Grandtotal			2955 USD	12725 USD

9. WGC PROPOSED 2007 BUDGET

Business Incubation		
	Budget	Mini Budget
Intl. Coordination	15000.00	15000.00
Soybean Cultivation Pilot Project	5380.00	5380.00
Women's Micro Enterprises Workshops	7000.00	7000.00
Intl. Consultation	1000.00	1000.00
Research/Projects Report	1000.00	1000.00
Office Supplies	300.00	300.00
Postage	200.00	200.00
Telephone/Fax/Internet	200.00	200.00
Web Maintenance	200.00	200.00
Total Expense	30280.00	30280.00

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