

**Preparatory Survey for Organic Farming
Project through BOP Business toward
Sustainability of Agriculture
in Republic of Uganda
Final Report**

August 2016

Japan International Cooperation Agency (JICA)

Saka no Tochu Co., Ltd.

Mitsubishi UFJ Research and Consulting Co., Ltd.

OS
JR
16-103

1 Executive Summary

1. Background and purpose of this project, and integrity of the development issues

Saka no Tochu Co., Ltd. (hereinafter Saka no Tochu, its headquarters is in Kyoto, Japan) have been conducted organic farming project to spread environmentally friendly organic agricultural method in Uganda, and gained practical experiences since 2012. This project was designed for small farmers to increase their income by sharing knowledge and know-how to improve agricultural productivity and profitability. In this project, Saka no Tochu that is specialized in agriculture and Mitsubishi UFJ Research and Consulting Co., Ltd. (hereinafter MURC) that is specialized in international development established joint venture (hereinafter JV) for project implementation.

1.1 Background

In the Republic of Uganda (hereinafter Uganda), an Africa's leading agricultural country, farmers engaged in agriculture near metropolitan area got started to use pesticides and chemical fertilizers recently, and environment specialists had been concerned soil degradation and water pollution by them. On the other hand, as the number of farmers was more than 60% of total labor force, medium- and long-term stable agricultural production with environmentally friendly agricultural method was one of key issues for sustainable economic growth.

Based on this background, Saka no Tochu implemented environmental protection and farmers' household income improvement project by pilot-scale organic cultivation of sesame from 2012 in Masaka district where farmers were suffering from shortage of rainfall and acidification. The lessons that Saka no Tochu learned from the project in Masaka and preliminary feasibility study for this project, Saka no Tochu had established an overseas affiliate named Saka no Tochu East Africa Co., Ltd. (hereinafter Saka no Tochu EA) in Uganda on September 2013, and started to promote BOP business in Uganda.

In this project, JV promoted agricultural method that reduces burden on the environment autonomously as a part of medium- and long-term business operation, which was based on following three basic principles;

1. To expand a new sales structure for selling organic agricultural products which put less environment load.

2. To provide educational opportunities to new farmers.
3. To establish an international division of labor in environmentally friendly agriculture.

JV team achieved principles 1 and 2 as Saka no Tochu had been developed its own sales structure and started farm operation to accept trainees in Japan, and had been promoting principle 3 regardless of locality. Therefore, the business direction of JV team aligned with this project in Uganda.

1.2 Objectives

The objectives of this project were to establish a system for farmers with 3 components;

1. To provide opportunities and enabled business environments for local farmers to learn environmentally friendly agricultural methods and to continue their production
2. To provide educational opportunities for the young or new farmers to be professional farmers
3. To make efforts for achieve sustainable expansion of organic farming.

1.3 Implementation Policy

JV team implemented this project based on following three basic policies.

■Basic Policy 1 : Implement the project effectively with the cooperation of local network

Implement the project with Saka no Tochu EA, JICA Uganda Office, AISUD that is a local microfinance NGO, and Local farmer groups.

■Basic Policy 2 : Consideration of the differences in the soil environment and climate conditions, and differences in technology and knowledge level of local farmers

JV team takes proper care of these factors such as regional soil environment and climate conditions” and “technology and knowledge level of local farmers “to enhance project outputs and outcomes.

■Basic Policy 3 : Focus on continuous public-private partnership for human resource development for farmers

Promote the development of local human resources in corporation with the related organizations.

The definition of “Organic farming/cultivation” in this project is not determined by certification of organic farming but ”agricultural products without the use of chemical pesticides and fertilizers”. Thus, JV team aimed to increase stabilized long-term yields and protect environment by improvement biological, physical and chemical properties of soil on the basis of the scientific understanding.

Based on the policies, JV team divided this project into three phases:

- Phase 1 (Production): Business environment survey, the spread of organic farming techniques and knowledge in Uganda
- Phase 2 (Sales development): Development of the retail network, the implementation of test marketing in Uganda
- Phase 3 (Export to Japan): Establishment of exports business model from Uganda to Japan

1.4 Study Area

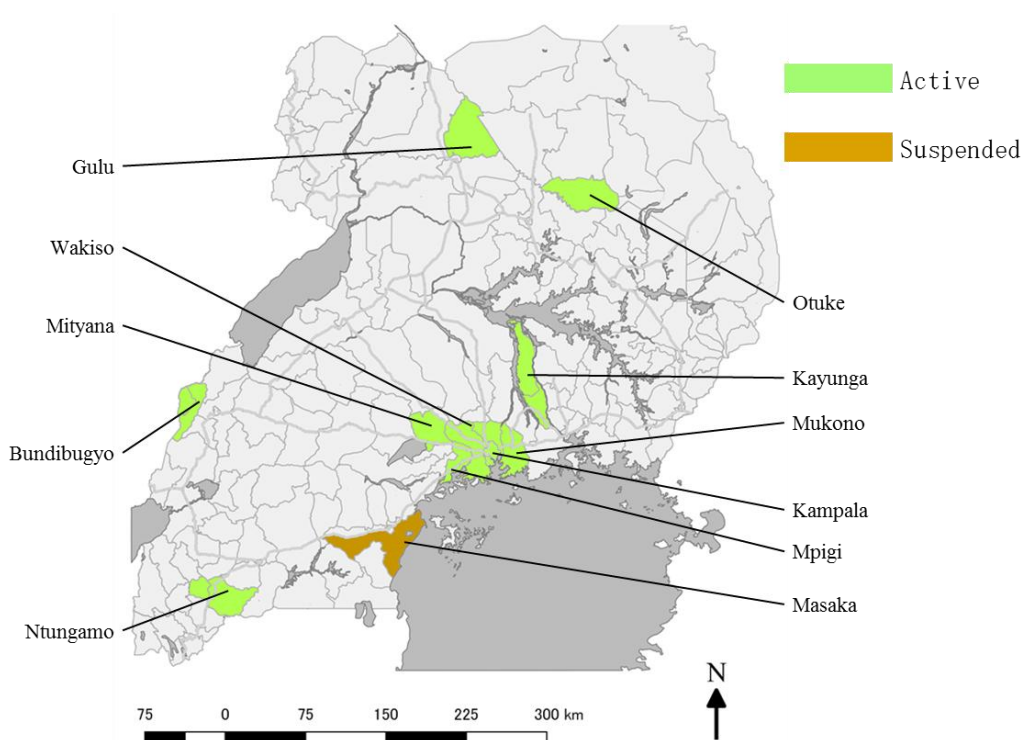


Figure 2 : The place of production

Source : Ugandan Bureau of Statistics (Updated November 25, 2015 | Dataset date: Jan 1, 2006, Contributed by OCHA ROEA)

1.5 Methods, Subject and Period of Study

1) Survey methods

JV team carried out both literature and field survey. From FY2014 to FY2015, JV team implemented phase 1 and a part of phase 2. From FY2015 to FY2016, JV team implemented phase 1, 2 and 3.

2) Subject and Period

The subjects of field survey were Butego sub county in Masaka and Buwama sub county in Mpigi, and the period was from September 2014 to August 2016. Survey items, implementation structure, the process table are on the following table and figures.

Survey Contents
1) Farmer's living standard, literacy level, and agricultural techniques in Uganda
2) Agricultural policies in Uganda
3) Information and analysis of investment and business environment in Uganda
4) Setting indicators for development subject, collecting and analyzing the baseline data (current status) for the indicators and scenario of development effects after the project
5) Similar activities by International development organizations
6) Implementation of pilot project in model site

● Implementation Structure

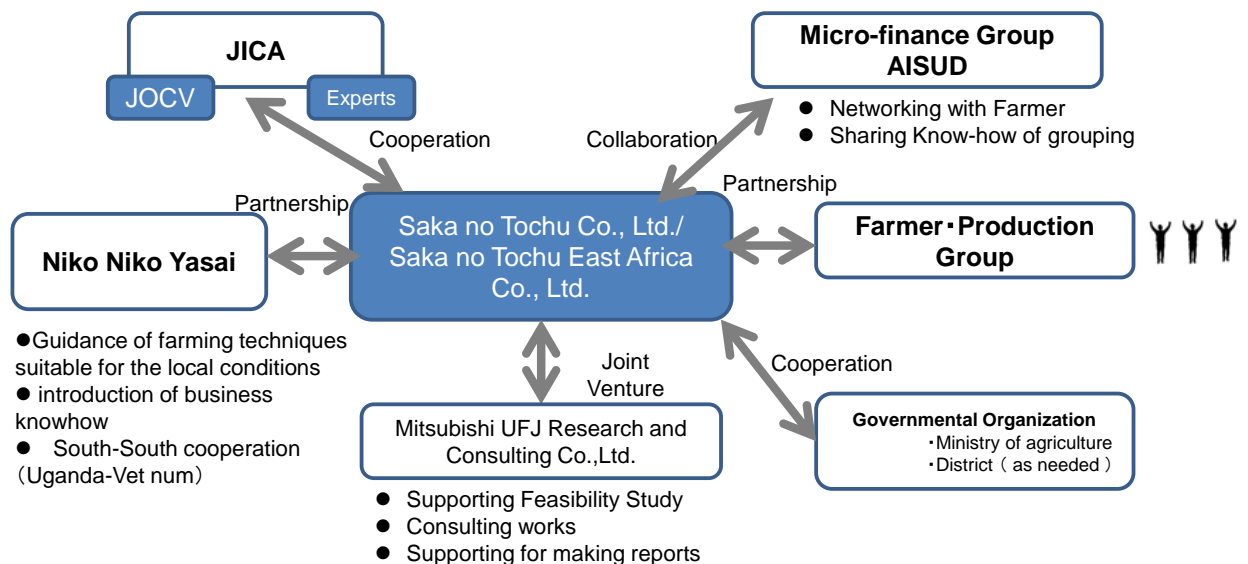


Figure 3 : Implementation Structure

It was concluded that the business model assessed through this project to be able to expect enough profitability though the problem was still possessed centering on the distribution side. Because needs for a food safety and security from the higher income group of a foreign residents living in Kampala were high. The similar system of delivery and production that Saka no Tochu EA provided has not developed in Uganda. (There was a part of similar service however it was not fulfilled consumer's demands)

The customer network in Japan has been developed, and it has secured that the export business to be able to expect the profitability by managing the challenges on the system of production and the distribution side. After this project ends, Saka no Tochu EA considers continuing to the business in Uganda.

(3) Progress and result to the first progress report

The base of a domestic production and sales market had set, at the same time the consultation process on cooperation with the model farmer more than 10 places had been selected. Thus, the vegetable productions in 4 places started in 2014. Moreover, Saka no Tochu EA started the business in cooperation with the production group of shea batter for export toward Japan as well as the production model farm of sesame seeds. Additionally, it was confirmed that needs for organically-grown vegetables of the foreigner residents (person of the higher income group as potential targets) who living in Kampala were high through the consumer survey (mainly domestic vegetable sales in Uganda) and the needs assessment executed in the 1st study.

(4) Progress and result to the second progress report

2 places (Masaka and Mpigi) were selected as model farms working intensively, and the collaboration in production including technical guidance was continued. The business of home delivery of the vegetable around Kampala had started in the end of 2014 as a regular basis. The baseline survey was conducted in the 2nd field survey. Furthermore, Saka no Tochu and Saka no Tochu EA successfully carried out sales promotion activities of domestic products in Uganda as "*Global green project*" with Mitsukoshi Isetan Department store for the export to Japan. Moreover, cooperation with NOGAMU that was the organic farming support group in Uganda began since October, 2015.

(5) Progress and result to draft final report

The cooperation with NOGAMU has started by agreeing with the production policy of Saka no Tochu EA. To maintain a certain quality of products consultation process was repeatedly taken with the individual and group farmers. Finally the number of model farmers increased from 2 places to 6 places. Furthermore, regular sales in 2-3 places on Wednesday have been established besides about 20 customers of home delivery.

The agricultural experts were invited from Niko Niko Yasai to carry out 4 times training which provide information and demonstration regarding soil making, compost making, nourishment, how to make liquid manure made from eggshell, vinegar, fruit, and plant residuals, and growing seedlings during April- May 2016.

(6) Future challenges

At the beginning, Saka no Tochu EA planned developing partnership with BOP farmers for organic farming implementation. However, BOP farmers face on instability in their life at all aspects that tend to affect negative impact on the stable production of vegetables.

Moreover, following up the technical guidance of organic farming with model farmers took a certain amount of time, thus setting up the business base also required substantial time. Those approached carried out clearly showed that BOP farmers have difficulty to provide agricultural production stably due to their instable daily life, then the factor becomes the risk of unstable business of Saka no Tochu.

In order to avoid that risk, JV team took the business approach that we mainly work together with the farmers who are the middle income class or farmers who have an local influence and network, encouraging the BOP farmers to participate our activities to spread organic farming techniques.

JV team is going to build the network among farmers as the future of business policy while farmers learn from each other. Good practices that BOP farmers can earn enough income will be introduced to the other farmers and encourage them to work voluntary. Regarding the human resource development, it is necessary to provide technical transfer, market opportunities, finance to expand their business and AISUD microfinance activities which Saka no Tochu EA provides, will be utilized to promising farmers.

In the table below, some challenges, measures taken, and future direction of our business were listed.

Table 1: Challenges, measures taken, and future direction of our business in Uganda

Items to be considered	Progress in the first year of the project	Challenges as of the end of the FY 2015 and measures to solve them	Progress in the second year of the project	Future direction of the business
To understand the current status of BOP farmers (of the model farms)	Implemented the simple household survey for model farms and farmers who working together and got baseline data of 21 households.	—	No new measures taken	—
Distribution: from farms to markets	<p>Situation and challenges of the distribution in the beginning of the project;</p> <ul style="list-style-type: none"> · Transportation from farms to Kampala city by farm owners · Transportation utilizing public buss · Vegetable collection by local staffs 	Prepare for the transportation logistics when the number of model farms increase	The numbers of model farms were increased comparing the first year, and transportation logistics is in the progress.	Distribution models from farms to Kampala city by farmers are going to be established while some of the vegetable need to be transferred by Saka no Tochu EA with care (especially for leaf vegetables and tomatoes) .
Distribution: targeting the high-end customers for vegetable sales	<p>To grasp our targeted customers, Saka no Tochu planned to expand the business, as adjusting the amount of production for the customers like below;</p> <ol style="list-style-type: none"> 1. Japanese living in Uganda: about 200 people and 100 households 2. Foreign residents living in Uganda: about 5,000 people registered in the information exchange site 	To understand the demands for the customers especially for foreign residents and Ugandans in the high income class.	<p>After the trial sales, the number of households who buy Saka no Tochu's vegetables is increasing. Our customer networks are expanding from Japanese households to foreign residents living in Kampala city.</p> <p>Saka no Tochu EA began to sell products to both Dutch and American communities.</p>	Saka no Tochu basically expands our customer network by word-of-mouth and its number is increasing year by year. The main challenges to decrease the logistic cost. Target sales for the development institutes such as USAID and GIZ are now under consideration because the amount of target sales is bigger than the sales for home delivery as traffic jam in Kampala city is worsening.

Items to be considered	Progress in the first year of the project	Challenges as of the end of the FY 2015 and measures to solve them	Progress in the second year of the project	Future direction of the business
	3. Ugandans in the high income class			
Import for EU market	—	To consider the new products such as honey and chili.	Since EU banned imported chili from Uganda, we stopped dealing with chili.	—
Import for Japanese market	—	To secure the large scale customer who needs products as container.	As a result of sales promotion, Saka no Tochu achieved the tie-ups with a Japanese major department store. Furthermore the sales expansion with whole sellers to develop new products.	With further sales promotion in Japan, Saka no Tochu plan to develop new customers as well as expansion of sales for the existing customers.
Documentation and process for export/import	Several kinds of export licenses were obtained through local lawyer.	It took a long time to obtain export licenses from Ugandan government because every time they require unobtained documents.	There is no big change from the first year, but we cope with Ministry of Agriculture, Export Promotion Board and so on. Sometimes we consult with JICA expert in Ministry of Agriculture.	To cope with official institute such as Export Promotion Board.
Possibilities to work with the small scale, BOP farmers	Most of small scale farmers in Uganda traditionally produce agricultural products organically because they are not affordable to buy agricultural inputs such as chemical fertilizers and pesticides. Agricultural farmers unions as represented by NOGAM have formulated the organic market in Uganda. However cheap chemical fertilizers and pesticides are distributed in the	In the traditional agricultural market in Uganda, determinations of agricultural prices are defined by quantity and cubic volume, not by quality or organic way of production. This market situation makes farmers decrease incentives to promote organic farming. Farmers will be interested in organic farming because pricing of	The amount of organic agricultural products are increasing because of Saka no Tochu EA's continuous technical advices and purchasing from model farms.	For further incentives of farmers, Saka no Tochu EA will buy good quality products with good prices while we set low prices as low quality products and it leads to the sustainability of organic farming. Low quality organic products will be utilized to processed foods or wholesales such as restaurants or catering.

Items to be considered	Progress in the first year of the project	Challenges as of the end of the FY 2015 and measures to solve them	Progress in the second year of the project	Future direction of the business
	domestic market.	Sakanotochu EA is determined by organic way of production and quality, and		
Relationships with small scale BOP farms	Saka no Tochu EA worked and selected model farms from farmers who have ever known or have relationships with AISUD activities. Good quality seeds and organic techniques were provided these farmers.	<p>Sometimes farmer's understanding toward organic farming was not enough and they used chemical fertilizers and pesticides.</p> <p>Good model farms are places where traditional organic farming has been implemented for a long time.</p> <p>When Saka no Tochu EA selected model farms, Saka no Tochu EA put emphasizes on the ability to complete project and re-select again in the second year.</p>	<p>Saka no Tochu EA re-selected model farms and searched new model farms.</p> <p>Putting emphasizes on abilities to produce agricultural products as organic way through intensive site visited and test purchasing, Saka no Tochu EA selected farmers in the middle class, not BOP farmers. The reasons are that Saka no Tochu EA found that need additional care and time for unstable productions and follow-ups after training to BOP farmers.</p> <p>They tend to have not only for instability of life, but also instability of production.</p> <p>This factor makes business risks of Saka no Tochu EA and that is because we avoid BOP farmers as the main model farms.</p>	Saka no Tochu EA is going to build the network among farmers while they learn their farmer's step to glow each other as the future of business policy. Good practices such as BOP farmers can earn will be introduced to the other farmers and encourage them to work voluntary. Regarding the human resource development, it is necessary to provide teach technical transfer, market opportunities, finance to expand their business and AISUD microfinance activates which Saka no Tochu EA provide, will be utilized to promising farmers.