

Kenya Policy Research Paper (PRP)

Title

Agro-processing of Fresh Vegetables, Fruits and Oils/Nuts

Implementing Agency

Ministry of Agriculture

Asian Counterpart

Department of Agricultural Extension, Thailand

General Information of the PRP

In Kenya, the dominant characteristic of agriculture is its primary production. There is very little on-farm and off-farm processing of agricultural produce which subsequently translates to low income for farmers and fewer jobs for the rural community. Lack of standard agro processing operational manuals and limited access to skills and equipment among the rural community has inhibited investment and constrained adoption of appropriate value-addition technologies.

The Kenya PRP was designed to address the problem of inadequate value addition for agricultural produce with particular emphasis to the development of an agro-processing operational manual and to this end several activities were carried out. The PRP is in line with the Ministry of Agriculture's effort to revitalize agricultural production as stated in its Strategy for Revitalizing Agriculture (SRA) 2004. The SRA identified marketing and value addition as one of its fast track interventions geared towards achieving rapid results in rural community development.

The target groups were the Kiyo women Self Help Group (SHG) in Central Province and the Keiyo Mango Processing SHG in the Rift Valley. The final output was to be an operational manual for both public and private extension agents, to add value to agricultural produce in the rural communities with the intention of improving their products thus subsequently increasing their income.

Result of the PRP

The result of the PRP was an operational guideline manual for rural community development focusing on the value addition of agricultural produce for extension workers and farmers. This manual is also an introduction to the principles of fruit and vegetable preservation and provides several recipes for this technique.

Lessons Learned

There are clear indicators from the Rapid Research Appraisal (RRA) and market survey that there is potential to upscale agro processing in Kenya if the government could provide a conducive environment for growth of the agro processing industry i.e., preparation of the policy and regulatory framework. In addition, Kenya would have to invest in developing the human capacity and revitalize its extension workers system.

The Kenyan representatives noted that Thailand had a very strong public-private partnership in the areas of research-extension-farmers linkages which was not strong in Kenya. Unlike Kenya, the infrastructure in Thailand is highly developed allowing for efficient delivery of products. In addition, the Royal Thai Government is very supportive of its farmers providing political goodwill in the form of financial support.

Future plan after PRP

In future the Kenyan representatives are looking forward to the opportunity to test the manual by sharing it with the stakeholders with further co-operation from JICA and the DOAE. If further funding would be made available they would like to enlarge the manual to incorporate other kinds of cereals.

The Kenya government will need to put in place a policy on agro processing and train extension workers and build capacity for agro-processing. In addition, the government will have to plan on enhancing public-private partnerships in Kenya and be willing to provide financial assistance to farmers involved in agro-processing.

Comments from the Asian partner organization

The Thai partners noted that due to time and logistical constraints, the women from Keiyo Mango Processing Self Help Group were not engaged in this phase of the project.

They also recommended that nutritional contents, taste and flavour must be culturally accepted and suitable for the local needs when processing the products. This was the reason for the recommendation of a market survey.

There is a difference in climates between Kenya and Thailand and therefore ingredients used must ensure a pro-longed shelf life.

There will be need for extension agents to be placed in each district to train farmers in agro-processing because this allows the farmer to solve their individual problems without being overly dependant on government for solutions. This would be similar to the very successful “lead farmer” concept practiced in Thailand.

Comments and Questions from Advisory Panel and JICA

Prof. Sakamoto

Comments

There seems to be no clear indication whether knowledge was duplicated or co-created. The partners will need to ensure that this comes out clearly in the report.

The partners must be very sure of the target market and viability of agro-processing in a subsistence economy such as Kenya.

Question

What was borrowed from the Thai manual and what was tailored towards the indigenous needs?

Answer

Joseph Irungu

We should have been very clear in the presentation that the Thai manual was an input and not an output. We borrowed heavily from their manual and then ensured it was suitable for our needs.

Secondly, it is unfortunate that due to time constraints the product was not tested on the market; we are therefore unable to confirm that it can be sold on the Kenyan market.

Question

The manual is very much at organizational level; how can it be applied to other knowledge levels?

Answer

Joseph Irungu

The difference between Thailand and Kenya is that there is more emphasis on marketability and commercial values in Thailand, whereas agro-processing in Kenya would focus more on food security. Therefore the food preservation and prolonging shelf life would be priority areas in the next phase. Agro-processing is more at the domestic/local level and not really industrialized. .

Prof. Kodamaya**Comments**

In your final draft to JICA it would be prudent to use “knowledge co-created” and not the “knowledge shared” because the whole purpose of the PRP was to co-create knowledge

I would suggest that you ensure that you tailor your knowledge to your indigenous people. The regional differences in Kenya and the differences in class and social strata, play a big part in sustenance. Address all conditions and needs that exist within the country thus making the manual a richer and more adaptable document that allows for the involvement of Kenyans from all spheres.

Response

Joseph Irungu

We tried to ensure that the process was as participatory as possible. The local self help groups were consulted and came to the decision on what fruits they would like to use for the pilot studies and we then prioritized them.

Comment

Assistant Minister Kyalo Kaindi

Agro-processing has become one of the key solutions to the concerns about food security in Kenya. The government also sees the need for a more aggressive marketing strategy for potential retail of agro-processing products in foreign markets. There are several areas with surplus vegetables and fruit in Kenya e.g., coastal area with cashew nuts, mangoes and avocados. Conservation of these products to last into the off seasons would enhance potential domestic food security. The government is looking for a medium to translate this message to the rural farmer in all areas at times when there is a surplus and ensure that technologies are inexpensive and accessible for his/her use. For this country it would be prudent for us to make agro-processing our priority in when it comes to food security because of the increased shelf life. In addition, agro-processing provides the opportunity to enhance the income of rural people.

Uganda Policy Research Paper (PRP)

Title

**Capacity Development of Doho Rice Irrigation Scheme Farmers
Association Leaders and Agricultural Extension Officers**

Implementing Agency

Ministry of Agriculture, Animal Industry and Fisheries

Asian Counterpart

Department of Agricultural Extension, Thailand

General Information

In Uganda, agriculture has to be transformed from the traditional subsistence-oriented farming to a more market-oriented production that is based on greater specialization and farmers' empowerment. This transformation cannot be achieved without application of modern technologies like irrigation and water management and better agronomic practices. It was on the basis of this background that Uganda chose to focus on the issue of farmers' empowerment through capacity development of the farmers' leaders and the technical extension staff.

This PRP was developed in line with the National Policies Plan for Modernisation of Agriculture (PMA), Poverty Eradication Action Plan (PEAP) and the National Agricultural Advisory Services (NAADS). Capacity building was achieved through field study visits and training workshops.

The process started with a general mobilization and sensitization of the key stakeholders and target groups in the pilot area. This was followed by a two-week field visit by two officials from the Doho Rice Irrigation Scheme, and two DORFSA executive members. Later two Thailand experts visited Uganda and held a training workshop for farmers and extension staff in the area.

Results of the PRP

Knowledge and skills in rice cultivation of the participants greatly improved as a result of the training workshop conducted by the Thai experts. The farmers gained

new knowledge on integration of rice cultivation and fish rearing, prompting other farmers to prepare their rice plots for rice-fish farming. In addition, a demonstration rice-fish pond was set up.

As a result of the training session and workshops, Water Users Groups have been formed to manage water supply and distribution. Training included lessons in self belief and independence.

Lessons Learned

Involvement and participation of farmers were sought through the entire process. It is clear from the results, that farmers' involvement in project development is crucial to the success of a project. It is also extremely important for the Ugandan government to enhance the capacity of its staff and its farmers' leaders through training and exchange visits with the Royal Thai Government. The Ugandan government will also need to strengthen both the farmers association and the water user's associations.

It was also recognized that farmers on the scheme had indigenous knowledge on rice farming which if used to complement the knowledge from the Thai experts would be of greater benefit.

The Ugandan representatives also noted the existence of income generating projects for women groups that supplemented the rice-fish male farming in Thailand. If this is duplicated in Uganda, there could be a significant raise in the nutritional standards of the community.

Future Plan After PRP

It is envisaged that Doho Rice Scheme Farmers' Association will provide funds, manage and maintain the rice-fish pond until the time the rice and fish are ready for harvesting. In the interim, the DORFSA and key farmers will publicise and train others on the methodologies and how to best benefit from the results of the new practices that are emphasized in the PRP.

Comments from the Asian partner organization

The Thai partners noted that if the pilot project with the water users' group was successful the ministry staff should try and recruit more farmers from the farmers association to implement the project.

The government officials should also aim towards the formation of a women's group which focuses more on food security and the nutritional concerns of the community.

In the future, it would be necessary build a rice cultivation training centre in Uganda that could service the whole nation using the Doho Rice Scheme as a model.

The visiting Thai experts acknowledged that they too had learnt a great deal from the indigenous knowledge imparted by the water users and indigenous rice farmers. They felt they could create new knowledge for other farmers in the region.

From their observation on the draft project proposal they suggested that the site of the model pond be expanded to a larger area within the community to target more farmers.

Comments and Questions from the Advisory Panel and JICA

Prof. Nishikawa

Comments

Prof. Nishikawa noted that it was important that the PRP was working within the government framework of the national policy on poverty alleviation. In addition, the team had prepared a very detailed and well documented report. His only concern was that the project would be perceived as a technology transfer project and not a co-created project. The team should ensure that this comes out very clearly in the final report.

Question

How do you modify the knowledge on rice fish culture into your own Ugandan indigenous knowledge within the project, instead of directly importing Thailand's rice-fish culture to Uganda?

Response

Charles Rusoke

We are not replicating what is being practiced in Thailand. There are different varieties of rice in Uganda specific to the different regions in Uganda where rice farming is practiced. With the creation of a Rice Centre, there will be a common hub where all these indigenous pieces of knowledge can be used to co-create new knowledge that is suitable for the Ugandan farmers with the help of the Thai experts.

Comments

Mr. Yoshida

The output of this PRP is based on the premise that collaboration with Thailand will continue on this project. Transferring technology directly from Thailand without

cultural consideration and input from the indigenous knowledge that the Ugandan farmers have, may not be the right approach. In order for the project to succeed, there must be a sense of ownership on the part of the farmers. We will also need to take into consideration the diet and staple foods of the community.

Response

Charles Rusoke

Before the introduction of the rice-fish pond, the community in this area consumed rice and fish as their staple diet. Fish were caught from Doho river that flows through this area. Thai methods and technology were brought in to add value to an already existing way of life and to improve the nutrition of the community. There are a lot of varieties of rice that Ugandan farmers have been planting since 1949. Each of these varieties has different characteristics and now Ugandan farmers can partner with the Thai to find a high yield variety that suits the Ugandan needs. The integration of fish into their paddies will improve the farmers' nutritional and financial needs. The Ministry of Agriculture is already planning on popularizing the rice-fish paddies with farmers all over the country.

Comment

Mr. Furuichi

In future there will be questions about Uganda's choice of partner in this collaborative knowledge co-creation project because in sub-Saharan Africa there are several other countries working with technology and methods similar to what Thailand is offering. A good example is Madagascar.

Special Seminar 1

Ms. Rumpuey Pattamavichaiporn

Director of Countries Partnership Branch

Thailand International Development Co-operation Agency (TICA)

Thailand

TICA Background

The Department of Technical and Economic Co-operation (DTEC) was established in 1950 under the office of the Prime Minister of the Royal Government of Thailand. In 2002, DTEC was deemed to be more suitable under the Ministry of Foreign affairs and therefore the department was relocated. Since then to the present it has been located as a department in the Ministry of Foreign Affairs but in 2004 for clearer identification the name of the department was changed to the Thailand International Development Cooperation Agency (TICA).

The Thai government's development policy is built on four main tenets:

- i) To promote social and humanitarian responsibility through technical co-operation and international partnerships for development.
- ii) To promote development and poverty eradication in developing countries by provision of technical cooperation to other developing nations
- iii) To strengthen existing relations and build new partnerships with other countries through technical and development cooperation
- iv) To enhance international cooperation with other countries through partnerships.

In 1955, the Thai government began to provide technical assistance to other developing countries under its new South-South policy. This policy aims to promote and develop close relationships with other developing countries and to exchange knowledge and experiences through technical cooperation in the areas that Thailand has the human expertise. The South-South cooperation with Africa in 1978 and the year 2005 was declared the African Year in Thailand. A committee of Economic and

Technical Cooperation was formed and this committee approved twenty-four (24) countries to be targeted for development cooperation in 2006 through to 2007.

The Thailand Development Cooperation for Africa focuses on development or improvement in the areas of agriculture, public health and income generation. The modality of this cooperation could either be bilateral, trilateral or an Asia Africa cooperation.

Under the bilateral cooperation Thailand developed the Annual International Training Courses programme (AITC) that trains partners from the developing world on Thai technologies, experiences and knowledge.

Such training projects exist for Madagascar and Mozambique. Another example of bilateral cooperation in Africa with focus on public health is several projects in sub-Saharan Africa that tackle problems related to HIV/AIDS and Malaria.

TICA has trilateral cooperation partnerships with UNDP, France and Japan in various areas. Characteristic of the areas focused on with UNDP are the development of SMEs, agriculture and rural development, improvement of public health systems. Unfortunately, no activities have started with France but are in the process of discussing the modalities of the co-operation. In the Trilateral cooperation with Japan, the areas of focus are agricultural extension and public health. Under this there are Third Country Training Programme (TCTP), Third Country Expert Programme (TCEPT) and the Asia-Africa Co-operation programme under which this project (Asia-Africa Co-Creation Programme (AAKCP) falls under.

I would like to kindly suggest that from this workshop, we would like to recommend that in the selection of suitable programme and PRPs for the various countries that the selection be made in line with the national situation and the policies of the respective countries. Any project that is selected should have the input and participation of the respective countries to ensure its success. We would also like to stress that the PRPs should be demand-driven to ensure that this aid has been as effective as possible.

Thank you.
