



## Eritrea: Value Addition Projects for Banana and Citrus Fruits Register Positive Results

Eritrea's Ministry of Agriculture (MoA) is piloting value addition projects for bananas and other citrus fruits. The initiative aims to help increase food alternatives and minimize post-harvest losses.



*Mr. Kahsay Negash,  
Director of Crop and Livestock  
Development Division*

According to Mr. Kahsay Negash, Director of Crop and Livestock Development Division at the MoA's Agricultural Extension Department, the projects, which were launched in collaboration with the Food and Agriculture Organization (FAO) three years ago, are delivering promising outcomes.

Since independence, the MoA has developed several value addition projects, mainly within the animal resources sub-sector.

Mr. Kahsay notes that a number of meat and milk processing plants have emerged and registered encouraging results. However, value addition projects for fruits and vegetables have not been as

successful as hoped in the past. Determined to address this, in 2018, the MoA and the FAO launched two technical cooperation projects (TCPs) which aimed to promote value addition in banana and citrus fruits in different parts of the country.

Currently, the importance of consuming sufficient amount of fruits and vegetables daily is well recognized. There is a growing awareness for their inclusion in a balanced diet, both in developed and developing countries.

Ms. Lidya Teclemichael, a National Project Coordinator for the banana value addition project, explained that in addition to the government's effort to promote horticulture development, the sector requires improved and adaptive technologies to preserve and process horticulture crop produce.

According to Ms. Lidya, the overall performance of existing value and supply chains, and market

of horticulture crops, is facing challenges related to effective and efficient post-harvest operations and commercialization. Consequently, there have been considerable losses of fruit and vegetables for many farmers. With the idea of sorting these problems, the MoA and FAO collectively took the initiative to promote value chain development of banana and citrus fruits in Eritrea.

Furthermore Ms. Lidya pointed out that the value addition project for bananas was launched in 2018, with a focus on the Gash-Barka region, namely Akurdut, Dige, Teseney, and Haykota (all of which are areas traditionally known for growing bananas).

The project has the following objectives: strengthening the value chain from farmers to consumers and to reduce post-harvest losses; promoting household food and nutrition security through having different preservation methods in the value chain; increasing the diversity of diet for the population;



*Women in practical session on banana value addition in Tekreret, Gash Barka Region*

and contributing in market coordination through enhanced market information systems. Furthermore, it is expected that the project can increase the participation of women and young people and promote their sense of entrepreneurship.

When describing the choice for banana in the value addition process, Ms. Lidya said, “The main reason for choosing this crop is its high production level in Eritrea. Banana plants produce fruit almost throughout the year. High production occurs in the months of March through May. However the fruit quickly spoils after harvesting. This leads to significant post-harvest losses for farmers. To avoid this, farmers are forced to sell their produce at a very low price during the harvest season.”



*Ms. Lidya Teclmichael*

The technical project includes awareness raising and capacity-building programs as its major pillars. Hence, the participatory training programs have resulted in developing different value added products, such as banana chips, banana hot sauce (keih tsebhi banana), banana mild sauce (alcha banana), banana flour, and banana bread.

According to reports and feed backs, this program is making a positive contribution towards improving dietary habit of



*Banana Value Addition: recipes demonstration in Akurdet, Gash Barka Region*

beneficiary villages. Akurdet sub-zone, in particular, has registered many positive results for participants and beneficiaries. Mainly, training and consultation programs on sustainable value chain and agribusiness practices were delivered to MoA staff and other partners, including the Ministry of Health, Ministry of Trade and Industry, National Union of Eritrean Women, among other national offices.

When discussing the future plans of the project, Ms. Lidya elaborated that the project has prepared a booklet on banana value addition and banana-related product preparation that will be printed and distributed soon. She also mentioned that they are working to expand the project to other regions of the country. Various machines for banana and citrus fruit value addition, currently in shipment, are also expected to reinforce the endeavor.

Finally Ms. Lidya underlined the importance of public awareness and sensitization, as well as the long-term sustainability of the project.

### **Citrus Value Addition**

Sharing objectives with the banana project, the value addition initiative on citrus fruits is being conducted in the sub-regions of Alla, Dekemhare and Mai-Aini

(Southern Region), and Ghindae and Beareza (Northern Red Sea Region). All of these regions are areas where citrus fruits have traditionally been growing.

According to Ms. Harena Kibrom, National Project coordinator of citrus value addition project, the project grew out as a result of the post-harvest losses and other market-related problems experienced by citrus fruit farmers.

Capacity development programs have been among the major components of the project. The training programs have focused on producing marmalade (juice) using all citrus varieties grown in farmers’ fields.

Marmalade is processed from oranges with and without their peels. According to Ms. Harena, “Since the essential oils and vitamins are found in the peels of the citrus, it is important to include them.”



*Ms. Harena Kibrom*

She added that, so far, 386 trainees (60% of whom are females and who include farmers, members of women's associations, administrators, agricultural staff, and others) have participated in workshops and training programs on citrus product development, sustainable food value chain development, agribusinesses and marketing.

Ms. Harena noted that the experiences gained from the training programs will be applied to upgrade the capacity of young professionals and farmers who work in citrus production across the country. It will also help those who plan to engage in value addition of these fruits.

citrus value addition and related product is being prepared.

Finally, she urged for more projects moving forward, continued awareness raising campaigns, and the establishment of farmers cooperatives.

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Ms. Harena added that a booklet on



*Citrus Value Addition: A demonstration in Dekemhare sub-region, Southern Region*

## Ministry of Agriculture along with Relevant Partners Conducts Dietary Survey

The MoA along with other relevant partners has launched a nutrition-sensitive dietary survey and demonstration in selected sub-regions of Eritrea. It is hoped that the project can help improve food and nutrition security in targeted communities through increasing nutrition knowledge, promoting healthy complementary feeding availability and access to diversified nutrition dense foods, encouraging good health and hygiene practices coupled with rural women's empowerment, and strengthening capacity of national stakeholders.

Ms. Tsinat Berhane, Secretary of the project, explained that the

project is focused on beneficiaries of the Minimum Integrated Household Agricultural Package (MIHAP). Initially, it began to assess

if MIHAP beneficiaries showed any change in their dietary habits after they had acquired agricultural packages from the MoA.



*Ms. Tsinat Berhane interviewing beneficiaries during KAP survey*

This project began with Knowledge Attitude Practices (KAP) survey to determine mothers' knowledge and care practices regarding infant and young child feeding in the Anseba Region (in Geleb, Habero, Muhabesh and Musha) and in the Central Region (in Laugien and Lamza).

Following the KAP survey, a trial to improve maternal and child nutrition practices was implemented by a technical working group, which included the MoA, the Ministry of Health, the Ministry of Marine Resources, the Ministry of Trade and Industry, the Eritrean Standards Institution, and various other groups and individuals.

The trial was conducted as part of a technical cooperation project between the MoA and FAO. Inter alia, it aimed to: assess food availability and feeding habits of the selected families; improve complementary feeding practices; promote consumption of nutrition dense food; address gaps in poor maternal and child feeding habits; and develop sound recommendations.



Moreover, a workshop focused on maternal infants and young children nutrition concepts and principles was carried out. During the course of the workshop important demonstrations were conducted to enhance the practical knowledge in identifying nutrition dense foods.

Ms. Tsinat noted that after the conclusion of the training and workshop programs, an assessment with regards to nutrition at household level, in terms of availability, accessibility and family practices was conducted

with in the MIHAP beneficiaries. Based on the outcomes of the assessment, counseling programs were arranged to address identified gaps on complementary feeding and hygiene at group and family levels. As part of the counseling programs, farmers were advised to use some part of their land to cultivate nutrition dense foods, such as pumpkins, beans, and flaxseeds.

Last, Ms. Tsinat explained that food demonstrations helped beneficiaries to identify and properly utilize food. For instance, beneficiary families learned that beans could be prepared in the form of mild/white sauce (alcha) or included in salads and soups. Similarly, demonstrations showed that flaxseed could be used with tea, bread, and cakes, and that pumpkins could be used for making juice, bread, cake, and marmalade.

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