



## ESTABLISHING MORINGA BASED ECONOMIC DEVELOPMENT PROGRAM TO IMPROVE THE LIVELIHOOD OF RURAL WOMEN OF ETHIOPIA

### PROGRESS REPORT



<b>Progress Project Report covering:</b>	October 2016 - July 2017
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**Achievement of the project's objective: 50 %**

## **Background**

Women in Ethiopia represent approximately 50 percent of the total population and account for 70 percent of the household food production. The rural women share in the total agricultural labour force is considerable, as about 48 percent of the agricultural labour force is driven by female family members. Since the subsistence economy cannot meet the households' basic needs, the participation of rural women in generating additional income is relevant. This is quite significant given the tendency of underestimating the contribution of women to production, food and nutrition security. In the Ethiopian context rural women's roles are critical and necessary in all development agendas.

## **Objective of the project:**

To improve the nutrition and income of the targeted rural women/communities in Southern Nationals and Nationalities and People Regional State (SNNPRS) through the development of the Moringa value chain (MVC).

## **Project outcome**

To achieve this objectives the project plans to achieve the expected following results:

- i) The groups active in the moringa value chain are organized, empowered and linked to the local and regional market;

- ii) A pilot processing line for moringa and moringa based products (i.e. oil, tea and nutraceuticals) is put in place;
- iii) The Ethiopian Public Health Institute is empowered for undertaking quality certification activities on Moringa based products;
- iv) Food security of the targeted households is improved.

### **Project Target Groups**

The project target groups are represented by women and rural communities with special attention to local institutions in SNNPR. UNIDO is training the beneficiary farmers, with special consideration of women, to produce and process moringa leaves and seeds, taking into account health and sanitation parameters and having as priority to combat malnutrition for small children and pregnant lactating women. Moreover, the technical and infrastructural capacity development of the project assists the farmers groups to create diversification for income generation through entrepreneurship capacity development.

The Moringa Value Chain development project results directly benefit the entire *Wezeka Kebele*, composed of about 7340 people, out of which about 50% are women. The moringa value chain could indirectly influence the livelihood of the residents in Arba Minch Zuria Woreda, particularly in the three neighbouring *Kebeles*, with a population of around 25,000 people.

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We would also like to recognize the support of the Gamo Gofa Zone Chief Administrator as well as the Arba Minch Zuria woreda Administration staff and Wezeka *Kebele* leaders.

UNIDO project team wishes to thank the Italian Agency for Development Cooperation for having kindly sponsored this programme and for actively participating in the project implementation.

## Acronyms

<b>AAU</b>	Addis Ababa University
<b>AICS</b>	Italian Agency for Development Cooperation
<b>AMU</b>	Arba Minch University
<b>BoI</b>	Bureau of Industry
<b>BoANR</b>	Bureau of Agriculture and Natural Resources
<b>CTA</b>	Chief Technical Adviser
<b>EPHI</b>	Ethiopian Public Health Institute
<b>FMHACA</b>	Ethiopian Food, Medicine and Healthcare Administration and Control Authority
<b>GEF</b>	Global Environment Facility
<b>MTF</b>	Moringa Task Force
<b>MTV</b>	Moringa Value Chain Project
<b>MVC</b>	Moringa Value Chain
<b>PSC</b>	Project Steering Committee
<b>SARI</b>	Southern Agricultural Research Institute
<b>SNNPRS</b>	Southern Nationals Nationalities and Peoples Regional State
<b>TAG</b>	Technical Advisory Group
<b>UNCCD</b>	United Nations Convention for Combating Desertification
<b>UNIDO</b>	United National Industrial Development Organization

## Executive Summary

The report focuses on the Project's progresses in respect to the action plan implementation. The initial pilot phase is working to lay the ground and to establish a base to construct a long term vision of the moringa's role in combating malnutrition and contributing to the economic development of the rural communities. The program aims at improving the performance of selected stakeholders active in the moringa value chain, in order to have a positive impact on the livelihood of rural communities with particular reference to women and youth.

### 1. Highlights of the main milestones achieved during the reporting period

The MILESTONES achieved are:

#### At Institutional Level:

- a) Official project launching and signature of project cooperative agreement 23 February 2017 between SNNPRG- BOANR and UNIDO;
- b) Experience exchange with other rural development project in Tigray;
- c) The first Technical Advisory Group (TAG) meeting of MVC chain project held in Hawassa on the 11 May 2017;
- d) Consultative meeting held at the Office of the First lady on 29 May 2017;
- e) The first Project Steering Committee held in Hawassa on 10 July 2017;
- f) Main updates on institutional process to realize the moringa regulatory framework.

#### At field and value chain level: Arba Minch Zuria Woreda

- a) Project inception team and implementation unit set up;
- b) Inception phase analysis conducted;
- c) The demarcation of the pilot project site and land development finalized;
- d) The development of draft design for the pilot processing plant developed;
- e) Alternative irrigation water source feasibility study concluded;
- f) The selection of beneficiaries, shared with stakeholders and endorsed by relevant authorities completed;
- g) The beginning of the training process and agricultural activities by the selected beneficiaries.

The followings are the main activities conducted during the reporting period:

- ***The demarcation of the pilot project site and land development finalization***

One of the most relevant results of the inception phase was the identification of suitable areas for the establishment of the moringa pilot processing line; the project area is located in the SNNPRS, Gamo Gofa Zone, i.e. Arba Minch Zuria woreda. The Regional Government allocated 30 ha irrigable land in Arba Minch Zuria woreda, Wezeka kebele, to be used as demonstration plot. In addition, office facilities, temporary shade and nursery for the propagation of planting materials were provided.



- ***Submission of selection of beneficiaries and endorsement from the relevant Authority***

Regarding the organization of the groups active in the moringa value chain, currently 110 trainees are participating, who will benefit about 570 residents of the *Kebele* with a list endorsed by Arba Minch Zuria Woreda Administration. In actual terms the project will directly benefit about 7340 people from Wezeka and about 25,000 people from the surrounding *Kebeles*.

The beneficiary selection process, as described in details in chapter 4.1, was participatory; after consultations at Federal and Regional levels, a ‘*Woreda Selection Committee*’ was established in Arba Minch Zuria *Woreda* to facilitate and coordinate the selection of beneficiaries. The selection of beneficiaries was then conducted by ‘*Melmay Committee*’ at *Kebele* level; the ‘*Melmay Committee*’ is composed of religious leaders, community elders, representatives of Health Extensions Worker, Development Agents, *Kebele* Administrators and women representatives. SARI and UNIDO actively participated to the process that was completed at the end of April 2017.

- ***Kickoff of training and agricultural activities to the selected beneficiaries***

Following the selection of beneficiaries, the implementation process of training modules on moringa value chain started in June. The first social coaching explained the details and the core values of the project and at the end an open discussion session was created where important feedbacks were drawn the attention by the participants.

The first training of selected beneficiaries on nursery operation started on 26 June 2017; the beneficiaries are gradually preparing 20,000 moringa seedlings to be ready in 45-50 days’ time for transplanting to the pilot project site.

- ***Main updates on institutional process to realize the moringa regulatory framework***

In the reporting period some relevant steps towards the realization of a regulatory framework were conducted. The moringa nutrient profiling process was finalized by EPHI and the laboratory analysis results for the major nutrition parameters were provided to the other stakeholders.

The Technical Advisory Group (TAG) meeting of MVC chain project, held in Hawassa on 11 May 2017, gave important updates on the first regulatory framework to be realized through the FMHACA draft Traditional/Herbal Medicines and Herbal supplements Policy document. Indeed, the Draft Policy Document presented to the TAG meeting will be the base to develop the regulatory framework for moringa products and food supplements.

Further discussions are currently running to facilitate the way forward to finalize the policy document and other guidelines, for example the quality control manual. Moreover, the Ethiopian Standard Authority developed another draft standard document for moringa leaves regulation, which is under review by the concerned stakeholders, and is expected to be submitted to the council of ministers for final approval in the next months.

These running activities, once finalized, will provide the necessary requirements to develop the national regulatory framework and will be the base for both national and international certification process.

- *The work and decisions of the project steering committee held in Hawassa on 10 July 2017*

The first Project Steering Committee was the main institutional activity in the reporting period, and it was held in Hawassa on 10 July 2017, the following topics were discussed:

- 1) Review the progress of the project;
- 2) Review the implementation of the technical activities of the intervention;
- 3) Provide the project with strategic direction to ensure the sustainability of the intervention.

Following the result of the plenary session (see chapter 3.7.2) the PSC has been effective in taking relevant decisions to step-up the general implementation of the program.

## 2. Output Summary

Starting from March until July 2017, the following activities have been implemented:

<b>Output 1: A Project Coordination Unit is put in place for a better management of the project initiative in order to get achieve the expected results</b>		
<b>Activities</b>		<b>Achievements</b>
1.1	Set up of the Project Coordination Unit and recruitment of the personnel	The intervention successfully finalized the set-up of the Project Coordination Unit and recruitment of the personnel.
1.2	Mapping study and baseline study	The value chain assessment, training gaps assessment and first gender analysis allowed the planning and preparation of the first stages of the action plan.
1.3	Identification of the most suitable areas for the establishment of the moringa pilot processing line finalized	The project area was located in the SNNPRS, Gamo Gofa Zone, i.e. Arba Minch Zuria woreda. The Regional Government allocated 30 ha irrigable land in Arba Minch Zuria woreda, Wezeka kebele, to be used as demonstration plot. In addition, office facilities, temporary shade and nursery for the propagation of planting materials were provided.
1.4	Identification of the project beneficiaries	First identification of project beneficiaries has been done in the Inception Phase.
<b>Output 2: : The groups active in the moringa value chain are organized, empowered and linked to the local and regional market</b>		
<b>Activities</b>		<b>Achievements</b>
2.1	Organization of the groups active in the moringa value chain with particular attention to women component	A final selection of 110 trainees was finalized in April, with a list endorsed by Arba Minch Zuria Woreda Administration that will benefit about 570 residents of the <i>Kebele</i> .
2.2	Implementation of training modules related to moringa value chain	Training of selected beneficiaries on nursery operation is on progress, preparing 20,000 seedlings to be ready in 45-50 days' time, for transplanting to the pilot project site.
2.3	Agreement with Manual developer, practical trainer and theoretical trainer	Trainers' identification on progress. In parallel two community-driven training manual developers (pictorial) have been identified, TOR to start the contracting process is on-going.
2.4	Social Coaching	First social coaching of beneficiaries has been implemented in June.
2.5	Training of moringa leaf processing	The training unit for the processing of the leaves has been finalized. Furnishing and equipping is on progress.
2.6	Design the training unit facility	The design process of the infrastructure has been completed.
2.7	Designing and setting up training infrastructures/materials	The training infrastructure in SARI institute of Arba Minch has been completed.
<b>Output 3: A pilot project unit for moringa and moringa based products is put in place</b>		
<b>Activities</b>		<b>Achievements</b>
3.1	Setting up the processing plant on project site	Draft design of pilot processing unit has been already submitted to the BoANR for review. Specification, BOQ preparation and construction of the pilot processing unit will be followed up by the BoI.
3.2	Selecting the designer of the pilot project site	
3.3	Follow up the design process	
3.4	Submitting the design for the SNNP Regional Government	
3.5	Follow Draft processing of pilot processing unit has been already submitted to the BoANR for review.	Follow Draft processing of pilot processing unit on-going.
3.6	Land development; demarcation and surveying of the site	Demarcation and surveying of 5ha of project site finalized.

3.7	Land clearing	Land clearing completed.
3.8	Topographic survey	Topographic survey completed.
3.9	Land preparation	Land preparation for the 5 ha completed.
3.10	Water and soil analysis	Water and soil analysis completed waiting the results.
3.11	Irrigation system selection	Irrigation water source and borehole location was identified. The detailed feasibility study, specifications and bill of quantity of the borehole drilling was conducted and submitted to BoANR.
3.12	Selection of appropriate irrigation technics	Selection of appropriate irrigation technics completed.
3.13	Selecting the irrigation scheme supplier	Selecting the irrigation scheme supplier on-progress.
<b>Output 4: The Ethiopian Public Health Institute and other partner (FMHACA, ESA) are strengthened for undertaking quality certification activities on Moringa based products</b>		
<b>Activities</b>		<b>Achievements</b>
4.1	Support to the Ethiopian Public Health Institute (and other stakeholders) staff dedicated to the moringa value chain for the quality certification;	The Nutrient profiling process was done by EPHI and the laboratory analysis results for the major nutrition parameters were provided. EPHI is on the progress of developing the finger-print of moringa.
4.2	Finalizing the TOR for the procurement of the Amino Acid and Fat analyser; requested by EPHI	The project is supporting the institute to have the capacity by procuring amino acid and fat analyser which is on the international procurement process of UNIDO.
4.3	Follow up the status of moringa leaves standards	While these activities will be finalized in the following months the follow-up process of institutional actors already started.
4.4	Follow EPHI process of developing the finger-print of moringa	
4.5	FMHACA: Follow Draft Policy Document presented to the TAG meeting by the FMHACA as well as revise the plan and budget requested;	
4.6	Follow the Ethiopian Standard Authority developing process of the draft standard for moringa leaves	
<b>Output 5: Food security of the targeted households is improved</b>		
<b>Activities</b>		<b>Achievements</b>
5.1	Promotion of Moringa Utilization in household nutrition habits in local communities	The nutrition assessment concept note, at the community level, was developed by Hawassa University based on the consciences of the TAG meeting. An agreement has been reached to achieve a final document by 10 of August 2017 between Arba Minch and Hawassa University, with the involvement of the FLO and chairing of the SARI institute.

### 3. Main problems encountered and measures taken:

During the reporting time, the main problems encountered were related to the **project infrastructures** in particular:

1. **The water quality of Chamo Lake prohibits the use for irrigation.** Due to its high PH value, the irrigation scheme had to be re-designed. The ground water exploration feasibility study was conducted and submitted to the regional government for consideration. The PSC meeting gave clear indication to speed up the process and overtake procedural stalemates related to the beginning of the infrastructural work (see chapter 3.7.2).
2. **Establishment of the post-harvest handling unit.** The design of the processing unit has been provided to the BoANR, but procedural steps have to be followed in order to ensure the finalization of the process. Nonetheless the PSC meeting gave clear indication to speed up also this procedure and a positive solution is expected in the next weeks (see chapter 3.7.2).

### 4. Forthcoming 5 month work-plan until 31 December 2017

The next 5 months will see an intensification of efforts in the following activities:

- The preparation of the feasibility study on organic production system of Moringa for the pilot initiative in order to create marketing opportunity and international certification.
- The development of GAP, GMP, HACCP, and food safety system protocol from moringa processing, taking into consideration local conditions and international requirements.
- The development of community based economic structure and sustainable institutional framework; e.g. Out-growers scheme, cooperatives, Private Public Partnership (PPP) etc.

The Institutional and field visits conducted with the newly hired international consultants (4-12 July) enabled the first feasibility study and a reflection on new projects priorities in this pilot phase. The visit has testified that the intensive production of *Moringa Stenopetala* in the allocated 5 hectares is already in the project implementation process.

Regarding the training for the 110 beneficiaries, the visit has verified the presence of contents that the curriculum includes all the primary elements to understand the production and mechanism of value chain. In addition, the training focused on the benefits of Moringa that will be particularly important to create awareness on the nutritional value of the plant.

Another important effort will be done in collecting and studying relevant information to define the principle of a Food Safety process. Moringa has been sold informally in the country without any guarantee of adequate sanitary hygiene and with the creation of a safety regulatory framework it will provide guidelines for GAP and GMP, which will be of paramount importance. Additionally, the development of the national quality standard is of great importance and will be done through the involvement of relevant stakeholders.

In the next months, UNIDO will facilitate the following activities:

- The coordination between the major implementers of the nutrition component of the MVC project (OFL/MOH, EPHI, Arba Minch and Hawassa University, SARI, FMHACA) to develop moringa-based food and nutrition supplements.
- Networking and linkage with international potential partner institutes to develop the national capacity on moringa nutrition profiling and certification.
- The institutional networking for the development of a protocol for nutraceuticals derived from Moringa in collaboration with relevant national and international institutes.

It will be important to define a way forward beyond 2017; it could be discussed as part of the agenda of the next PSC the objective of providing the project with directions to ensure a feasible strategy for the sustainability of the intervention.

Furthermore, some strategic activities such as the realization of the national and international certified standards and the completion of infrastructural works, depending on external factors, may demand a project no-cost extension, option that is currently under evaluation of the project team.

## 5. Cooperation with other projects / components

Following the Official Launching of the program, some important activities have been conducted to establish synergies with other stakeholders/development partners aimed at improving project effectiveness and sustainability.

**TechnoServe:** the meeting with this organization was helpful to understand their experience in terms of successes and challenges of working with cooperatives. One of the interesting points highlighted by TechnoServe organization was the planning of a joint project with cooperatives, which is crucial to verify the existence of a clear business case for the project beneficiaries and a sustainable level of access to finance for the organization. For MVC Project, three main lessons learned:

- The importance of elaborating feasibility/industrial assessment to clearly define the specific business models and case, including an evaluation of immediate and long term benefits of the cooperative ventures;
- Significance of having a sound stakeholders analysis to be able to identify ideal partners and member organizations;
- Importance of a sustainability analysis of cooperatives beyond the project action. Coherently with the current MVC project strategy, and as highlighted by organization officer Ms. Meftihe, capacity building actions (as acquiring financial skills, training on maintenance of equipment and similar long-term educational activities) could be considered as strategic directions towards the objective of the sustainability of interventions.

**The Bill & Melinda Gate Foundation:** the foundation was identified as a possible partner for collaboration and funds mobilisation. The following officers were present at the meeting: Ms. Amsale Mengistu – Senior Regional Advisor-Ethiopia SPO; Mr. Raphael Makonnen – Program

Officer, Nutrition; Dr. Frew Lemma – Higher Advisor to the Ministry of Health; Lemlem Sisay (PhD) – Chief Technical Advisor; and Misgana Elias (National Project Coordinator)

Some potential areas of collaboration identified:

- Nutrition thematic area –MVC project with its objective of empowering rural women through job creation and income generating activities with focus on creating conditions to assure supplementary food for women and children;
- Livestock genetics; under Agricultural thematic area, health and feed are among the main priority areas addressed by the foundation. In this framework, considering that the development of moringa plantations could be considered as initiatives of horticultural production, there could be rationale for a cooperation in this sector;
- Moreover, moringa production could be evaluated for the potentialities that the plant offers in the sector of animal feeding, opening other possibilities for an active collaboration in the agricultural thematic area of the foundation.

The meeting was concluded with the idea of updating the session with the proposition of taking time to better define future scenarios for possible lines of cooperation.

### **Collaboration Efforts with other UN Agencies**

Efforts were made to collaborate with other UN agencies such as UNCCD, which works in partnerships to promote projects on combating land degradation, desertification and drought, especially in Africa. UNCCD identified moringa as a potential plant to combat desertification, and play vital role in agroforestry and food security. In this regard the Chief of PTC/AGR/AIT Division and the CTA of the MVC have been working with the GEF coordinator of UNIDO to establish collaboration mechanism between UNCCD –UNIDO-GEF and the private sector to create sustainable marketing opportunity for the rural moringa farmer. Furthermore in order to build a sustainable market, it is important to define the difference between *M. Stenopetala* and *M. Olifera* regarding the nutrition composition. A sample of *Stenopetala* will be sent to UK for verification of the nutrition status.

### **Cooperation with other bilateral donors**

Initial contacts have been made with the Japanese Agency for International Cooperation (AICA) as they were implementing a program for moringa value chain development, particularly on the marketing of the moringa tea and leaves to Japan.

## Chapter I - Description of the main activities performed

### 1. Set up of the Project Implementation unit

The intervention successfully finalized the set-up of the Project Coordination Unit and recruitment of personnel. After the selection of the basic Project Management Unit, the Chief Technical Advisor, the National Project Coordinator and National Expert, two international consultants have been additionally hired; the Agro Value-Chain expert and the Strategic Advisor – Nutrition.

This allowed:

- the preparation of the feasibility study on organic production system of Moringa for the pilot initiative in order to create marketing opportunity and international certification;
- the preparation of the road-map for the Moringa VC, to scale up the project from its pilot initiative to full-scale, with special emphasis on the nutrition component.

### 2. The Inception Report

As the inception report described in detail, the Inception Phase allowed the achievement of the following activities:

- Profiling the associations, cooperatives, and other social forms in moringa distribution areas, in order to identify the opportunities and challenges related to the value chain and to prepare an appropriate action plan to mitigate the challenges;
- Surveying potential project site, taking into account production potential, the communities' awareness and the status of the women group that can be involved in moringa production to create economic empowerment;
- Identifying the project site, selecting the appropriate technology and infrastructure in order to develop the value chain and its quality process;
- Identifying the area of intervention regarding the nutrient analysis and nutrition profiling of different moringa products, to ensure quality and certification;

#### 2.1 Methodology and main results

To achieve the above objectives the following activities have been conducted:

- Conduct of a detailed baseline studies, assessing the current policy framework and relevant stakeholders' role and participation framework;
- Identification of specific beneficiaries of the project with due attention to gender equality and empowerment of women;
- Identification of the pilot project site for production and processing initiatives considering the target groups;
- Identification of the appropriate location for the construction of processing facilities, such as moringa leaves drying, processing and oil extraction units;
- Identification of the potential of partner institutes, EPHI, FMHACA ESA, to conduct nutrient analysis and nutrition profiling of different moringa products.



The selection criteria for the **project site identification**, was developed with the involvement of the relevant stakeholders at the regional and zonal level.

The criteria adopted for the site identification were:

- natural distribution of moringa in the area;
- potential for improved production system;
- communities use and knowledge related to the resource;
- proximity to various market outlets;
- availability of pilot project site.

As already specified in chapter 5.2 of the Inception Report, the methodology of data collection and study was supported by satellite image analysis and field observation, using hand-held Global Positioning System (GPS) to gather spatial data of land use patterns and moringa distribution in selected Woredas of the Gamo-Gofa Zone.

As result of the process, Wezeka kebele was identified as suitable area of intervention for MVC project, also considering the availability of 30 hectares of land that the administration offered to the development program.

Regarding the socio-economic profile of the selected project area, a study was developed in order to analyse specific characteristics of the context, the distribution of resources, community participation schemes, community development structures and role of women in the moringa value chain process. The results of the study indicated that the distribution of Moringa in Wezaeka kebele is about 14 trees per ha along with other horticulture and field crops; such as banana, maize, mango, common bean, sesame, papaya, sorghum and avocado. Moringa is considered a source of food, utilized under unstructured and production system<sup>1</sup>.

The data collection was undertaken at Zonal, District and Kebele level, through involvement of government institutions, followed by group discussions and individual interview sessions. The secondary data collection included demographic and socioeconomic data, data on crop diversity and relative coverage. The group discussions were held within community members including youth, in particular high school graduates, farmers and agricultural experts.

Individual interview sessions were also held with the intention to analyse the farming communities' structure and the farming systems related to the moringa production. Sex disaggregated data has been collected from 40 small-holder farmers differentiated by age and literacy levels.

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<sup>1</sup> *Establishing Moringa Based Economic Development Program To Improve The Livelihood Of Rural Women Of Ethiopia. Inception Report*

## 2.2 Selection of the beneficiaries

The first process of beneficiary selection was undertaken in the initial stages of the inception phase of the project.

As specified in chapter 4.5 of the inception report, members of the group discussions conducted during the socio-economic study, recommended the inclusion of specific categories of beneficiaries such as women and young people (in particular high school graduates). Indeed, these segments of the community face cultural, social and economic marginalization and are vulnerable to unemployment, migration and extreme poverty. The communities represented in the group discussions have underlined the importance of involving rural women farmers, among the main project beneficiaries.

Another useful recommendation from the discussions was that the selection process should work with the existing government public structure mechanism, to ensure the participation of the majority of the community.

The identification of the main target groups and the basic principles established in the inception phase, allowed the succeeding planning and implementation of an accurate selection of beneficiaries in the following months, as described in chapter 4.1.

## 2.3 Project Action Plan

As a result of the studies conducted in the Inception Phase a detailed action plan was developed and implemented in the succeeding months.

A new updated work plan until the end of the project was developed and reproduced in this report (see chapter 6).

## 3. Activities conducted at institutional level

### 3.1 The official launching of the project

The official launching of the project was held on 23 February 2017 and was officially declared by the First Lady of the Federal Democratic Republic of Ethiopia. The event was attended by officials from the Federal and Regional institutions and it was covered by national and international press.



Fig. 1 Ceremony for the official launching of the project



Fig. 2 Press conference held by the Head of AICS, Ms Ginevra Letizia

### 3.2 Experience exchange with other rural development projects in Tigray

The team composed of the CTA and the focal person of SNNPRS of the MVC visited and established a network with different organizations, representing future possible partnerships. The visits were an important and rewarding learning experience.

Mums for Mums is a local charitable NGO that was established in 2001 in Mekelle, Tigray, with the objective of tackling the problem of poverty in young, single and destitute women, strengthening their self-reliance to avoid a life of dependency and deprivation.

Mum for Mums' vision is aimed at helping young women to get out of the cycle of poverty and insecurity. Their approach is based on promoting income generating activities mainly through implementation of skills training initiatives.

The NGO has a holistically approach to the problem of vulnerable women. For example, some of the most significant activities are represented by trainings on basic nutrition and food preparation, based on the valorisation of easily available and highly nutritious food sources, such as cactus, potatoes and sweet potatoes.

The team visited the elderly center, a clinic serving senior citizens and the training units specialized in bakery, embroidery, tailoring, pottery and food processing. In the past 5 years the organization supported more than 3749 people with trainings aimed at creating sustainable livelihood for the beneficiaries.



*Fig. 3 Mums for Mums organization training space.*



*Fig. 4 Groasis Waterboxx*

The WATERBOXX project is a partnership project between a school based in California, USA (El Verano Elementary School in Sonoma) and an elementary school located in Mekelle, Tigray. The 'Food by Youth Project' is a program involving 100 students with activities of planting fruit trees, using the GROASIS WATERBOXX, a technology based on the principles of assuring water conservation and food security.

The Kalamino High school Agricultural Development Project run by Engineers without Borders – Israel (EWB-IL) and Tigray Development Association was also visited by the team. The focus of EWB's activities is to value the use of an improved technology, in consideration of local conditions and in association with the communities, to improve living conditions and respect of the environment.

Indeed, EWB's agricultural development project focuses on improvements in agricultural productivity, nutritional diversity and education of agronomists, students, farmers and professionals.



*Fig. 5 and 6 Kalamino Farm*



*Fig.7 Drip irrigation system facilities*

The project, launched in 2014 in partnership with the Tigray Development Association (TDA), aims at increasing the capacity of the agricultural infrastructure in order to improve the opportunities of agronomists and small landholder farmers.



*Fig. 8 Nursery in Kallamino*



*Fig. 9 Project team with EWB volunteers*

Kalamino farm is one the first Agricultural Innovation and Technology Center in the region (AITEC Farm). With a demonstration and training plot of 0.5 hectares and through the implementation of improved agro-technical methods and modern technology, the project has demonstrated new potentialities, in particular that vegetable yields can be enormously increased

(up to 10 times). Thanks to the support of EWB, The Kalamino Farm demonstration plot has expanded its premises with two other pilot sites, including the participation model farmers in the same district. The farmers, in collaboration with EWB are implementing a 0.5 hectare drip irrigation system. In addition, EWB supports the agricultural development at the Mekelle School for visually impaired people, a project that has been initiated together with the local branch of EWB, involving students and lecturers from the Mekelle Institute of Technology.

### Adigrat Beles Project:

On 30 March 2017 the team visited the Adigrat Beles Agame Plc. Project. The program supports the development of the Cactus processing. The local government contribution to the project has been an interesting example of cooperation and lesson learnt to be considered for the stakeholders related to the MVC project.



*Fig. 10 Beles Processing line*



*Fig.11 processing facility*

The organizational structure, the challenges, the opportunities, the involvement and the ownership of the local government has been discussed with the project national expert and some of the beneficiaries, acquiring precious recommendations for the institutional sustainability of the MVC program.

### **3.3 The first Moringa Value Chain (MVC) Technical Advisory Group (TAG)**

The first Moringa Value Chain (MVC) Technical Advisory Group (TAG) meeting was held on 11 May 2017 in Hawassa. According to the mandate of the working group as defined in the inception report, the meeting had three major objectives:

- Acquainting with the MVC program and objectives and sharing the on-going activities with the aim of bringing the group into a common understanding the objectives of the program and the main features of the work plan;
- Realize consensus on duties and responsibility of stakeholders to meet the targeted objectives in the defined timeframe;
- Discuss and identify constraints and challenges of the current program.

The first TAG meeting was important to clarify the project objectives as well as to introduce other new joining stakeholders, such as the Arba Minch Woreda Administrator, the Hawassa University and the FMHACA representative.

The Representative of SNNPR region and the South Agricultural Research Institute (SARI) confirmed the deep interest of the region on the running program. The representative disclosed the region's plan to introduce similar development projects in several zones of the region, underlining the prominence of food and nutrition security policies as high level development objectives of the Government of Ethiopia (GoE). SNNPR is overseeing to use the processing and production plant, foreseen by the project, as a center of excellence, to be promoted as a clear demonstration of sustainable production and consumption of food commodities. Furthermore, the representative also reminded the significance of fostering the community food security highlighted the importance of producing nutrients for animal feed, crucial in strengthening the conditions of livestock in rural areas.

Regarding the nutrition component, EPHI shared information on the finalization of the nutrition profile process and illustrated the steps undertaken by the Moringa Task Force (MTF) on the development of the finger print process.

Another important point agreed in the meeting was the decision to conduct further nutrition assessments, as a strategy to improve the food and nutrition security of the communities. In this framework, a consensus was reached on the need to foster the scientific research on the nutrient qualities of moringa as well as the importance of developing alternative recipes for a better diet diversification.

This task was assigned to Hawassa and Arba Minch University with the support of EPHI and the nutrition office of OFL; an agreement on the future use of procedures related to anthropometric measurement and clinical assessments was positively reached in the same session. Moreover, EPHI, mentioning the future regulatory framework concerning moringa, highlighted the need of focusing on the development of quality control manuals calling for a high involvement of FMHACA; EPHI and FMHACA had agreed to have a work session immediately after the TAG meeting. The TAG sessions has reached a good level of understanding and information on the following main points:

- The status of the moringa nutrition profile: update on the analysis done by the EPHI;
- An update on the first regulatory framework, through the FMHACA draft Traditional/Herbal Medicines and Herbal supplements Policy document;
- Update of the SARI moringa agroforestry research initiative, which is part of the MTF program;
- The consensus on development of a concept note for the community based nutrition assessment, guided by the advisor of the OFL/MoH.

### 3.4 Consultative meeting at OFL (Office of the First Lady)

The Consultative meeting at OFL (Office of the First Lady) was held on 29 May 2017 to facilitate harmonization with the NATIONAL MORINGA TASK FORCE (MTF) and to follow up the proceeding and decisions reached in the first TAG group,

The participants of the meeting were higher officials of the office of the First Lady, the Deputy Director General of EPHI, the Acting Director of Food and Nutrition Research Directorate of EPHI, the coordinator of Moringa Task Force (MTF), UNIDO MVC project CTA and technical advisors.

The session had three major objectives:

1. Fostering the collaboration modalities between MTF and MVC Project:

A discussion was conducted on the methods to be followed by MTF delegates to contribute to the success of the MVC project. The following points were raised:

- The importance for the members of the MTF to actively participate and contribute in the work of PSCs and TAGs.
- The need of establishing procedures for sharing documents and plans of action in order to harmonize the knowledge framework around moringa interventions.
- The necessity of avoiding duplication of efforts.

2. The mechanism of Information sharing to MVC project:

The MTF and MVC project stakeholders, (UNIDO, FLO & EPHI) agreed on the importance of sharing scientifically verified information as well as knowledge and skills generated through the research undertaken by MTF through the National Research Grant of MoST (the Ministry of Science and Technology program, under which the MTF prerogatives are disciplined).

3. Partnership and harmonization with MVC project:

The MTF chairman recommended a way forward to strengthen the cooperation in the following areas:

- MTF could support MVC Project through activities of counseling during planning, advocacy and any activities needed to avoid duplication of efforts and secure transparency and accountability;
- Collaboration in capacity building, through training and supporting activities recommended by the MVC project coordinator;
- UNIDO could be invited in technical reviewing workshop, organized by the MTF, to be informed about scientific findings.
- UNIDO, through the project, may also give support in the facilitation of crucial supplies to MTF facilities (regents, kits and chemicals).

### 3.5 Field Missions in Hawassa and Arba Minch

4-7 April 2017/13-15 May 2017 /4-8 July 2017

In the reporting period, the project team, led by the CTA, regularly visited the relevant stakeholders, where working relationships were established at Zonal, Woreda and Kebele level. The fruitful cooperation was tested at different stages of the project activities, for example by collaborating to solve administrative constraints related to land allocation, the demarcation of the pilot project site and the participation of institution in the beneficiaries' selection.

The mission undertaken in April in Hawassa had the main focus to meet Mr. Tilahun, Head of BoANR of SNNPRS, and other prominent members of SARI. The field mission team was composed by Dr. Lemlem Sisay, Chief Technical Advisor at UNIDO, Mr. Getahun Yacob, Directorate at SARI and Mr. Daniel Desalegn, National Expert at UNIDO.

The meeting in Hawassa was held to discuss the main features regarding the project objectives in the first year. Particularly important was the discussion related to the mechanism of selection of project beneficiaries. Moreover, the important issues related to the sustainability and the ownership of the program was discussed in the session. In addition, a review of the project action plan was concluded and the shared roles and responsibilities among present stakeholders confirmed. In terms of infrastructure, an important point of discussion was the decision of the Region to give the availability of a temporary shelter for the processing plant activities and the nursery site.

The second part of the mission was in Gamo Gofa Zone, Arba Minch city, organized to meet the Zone Administrator and share with his office the relevant project progresses. The meeting verified the interest and motivation of local authorities for a fruitful collaboration in the project framework. The team also visited the office of Dr. Ashebir Balcha, Director of Arba Minch Agricultural Research Centre of SARI where the project office and the temporary training unit is hosted. Furthermore the Centre confirmed the interest to collaborate with the project, by sharing its technical expertise, created within the agroforestry research team working on moringa studies.

Moreover, under request of the Director, UNIDO as a capacity building activity, assisted with the establishment of internet connection at the Research Centre. All these arrangements testify the high level of understanding and mutual support between the MVC project and Arba Minch Research Centre.

Finally the project team and Dr. Yechala (Arba Minch University V/President) has decided to assign Dr. Simon (Researcher and MTF member) as technical advisor for the project, after verifying his willingness to participate in the program.

Regarding the Nutrition assessment, at the community level, several meetings were held by the project team with Hawassa and Arba Minch University. An introduction to the objectives of the project was proposed to the two universities, emphasising the value of the yet unexpressed potentialities of Moringa or 'Haleko', as it is commonly known in the area. The Universities expressed their enthusiasm in participating and supporting the objectives of the program. Additionally, an explanation was also given about the three pillars of the project: (1) the community level training to empower the rural women, (2) the establishment of the pilot



production and processing unit, and (3) the institutional capacity building regarding nutrition profiling, quality certification and the regulatory framework process.

Due to the importance of the study, Arba Minch University proposed its participation in the nutritional assessment through the commitment of its professional researchers. Similar response and enthusiasm was expressed by Hawassa University.

Following the meetings with the two universities, their representatives were invited to participate to the 1<sup>st</sup> Technical Advisory Group meeting, as regular members of the consultative group. As a result of the work held in the 1<sup>st</sup> TAG meeting a concept note regarding the nutritional assessment was developed by Hawassa University. Arba Minch University did not participate to the meeting but provided its contribution through a critical review of the document. In this process the FLO nutrition and health advisors were assigned to guide the nutrition assessment planning to be conducted at the community level. In this framework it was decided that the coordination meetings will be facilitated by the SARI Institute.

### **3.6 Joint mission with new recruited international consultants**

The Joint mission, with new recruited international consultants, was held from 3 to 13 July 2017 in Addis Ababa, Arba Minch and Hawassa.

#### Visit to AICS premises (30 June 2017)

A first visit to AICS office was held on 30 June 2017, to meet the Director Ms. Ginevra Letizia and the technical expert Ms. Rossella Belli, for an update meeting of the project and to introduce the newly-hired international consultant, Ms Alice Perlini, Agro Value Chain Expert.

#### Meeting with Ethiopian Horticulture Producers and Exporters Association (EHPEA, 3 July 2017)

A short meeting was organized to explore areas of collaboration with Moringa Value Chain Project on the following fields:

- Integrated pest management system
- Waste management system
- GAP assurance /the association has four assurers
- Promotion of Moringa – the association could raise local investors’ awareness on moringa.

The participants at the meeting were:

- Mr. Tewodros – Executive Director of the Association.
- Dr. Adhanom – Integrated Pest Management Advisor
- Dr. Lemlem S. Fetene (UNIDO - Chief Technical Advisor)
- Ms. Alice Perlini (UNIDO – Agro Value Chain Expert)
- Mr. Gianfranco Pulinas (Unido - Strategic Advisor)
- Ms. Misgana E. Kallore (UNIDO - National Project Coordinator)

In order to develop a study on the moringa regulatory framework it is important to understand the challenges and past experiences under the legal regulatory framework in the horticultural sector.

The project team received a copy of the Mandatory code of practice for the horticultural sector, endorsed by council of Ministers and it is considered an important tool for the feasibility study to realize a similar framework in the moringa use.

#### Field visit Arba Minch and Hawassa, SNNP Region, Ethiopia (4-12 July 2017)

The objective of the field mission was to follow up the activities of MVC Project in Wezeka Kebele as well as to attend a meeting with relevant institutional stakeholders at the Zonal level, in particular Arba Minch University. The following activities were conducted:

- Visit to Wezeka Kebele Administration office (5 July 2017).

The meeting held with the agricultural development office allowed a better understanding of the general context of the project and in particular challenges and constraints for the agricultural development (infrastructure and resources) of the Kebele communities.

- Visit to Nursery Activities:

The activities allowed a first introduction of the project activities, in particular the training for the 110 beneficiaries selected in the project areas (see below chapter 3.1.2). It was noted that the training includes all the elements useful to the production and value chain of the plant. First assessments were completed which highlighted the benefits and nutritional value of moringa as well as to raise awareness of the activities.



*Fig 12 and 13 Field visits; sharing first impressions with beneficiaries and verifying training on planting processes*

#### Meeting with Arba Minch University (6 July 2017)

The meeting was held with Dr. Simon Shibru Cheche, Research Directorate Director and chairman of the regional MTF and Befekadu Tariku, representing the College of Medicine and Health Sciences.

The meeting with Arba Minch University (AMU) was useful to clarify the way forward on the work of the nutrition assessment as specified in the recent TAG meeting and also to understand the role and work of the office. The director, talking of the planning efforts in the nutritional assessment, gave reassurance on the will to work with other institutions as Hawassa University,

carefully avoiding duplication of efforts with other programs. The session confirmed the importance of the role and capability of Arba Minch University in being a prime actor in the national effort for the research related to moringa plant.

It was agreed to foster the collaboration also through the commitment of the AMU to participate to the future TAGs meetings. As part of the meeting, it was possible to visit the Moringa research project, close to Arba Minch, a plantation where important pilot tests related to cultivation techniques of moringa species are running.

### **3.7 Project Steering Committee**

#### **3.7.1 ToR and Composition of the Steering Committee**

The Project Steering Committee is considered to be the highest level of the Project governance structure composed of relevant federal and regional research & development institutes, Italian Agency for Development Cooperation (the donor) and UNIDO etc. It is chaired by the BOANR of SNNPRS. The purpose of establishing the Steering Committee is to review the progress and obstacles encountered and ultimately suggest solutions.

The main functions and responsibilities of the PSC are:

- a) Provide the project with strategic direction in terms of implementation of the activities;
- b) Ensure the effective coordination and cooperation between relevant stakeholders;
- c) Monitor the progress towards achieving the planned outputs as well as to review and approve the annual work plans;
- d) Guide and direct to resolve problems that might arise at the different level of Project structure during its implementation;
- e) Provide policy direction as deemed necessary for the sustainability of the Project;
- f) Ensure that the available resources are used to achieve outcomes and output defined in the Project document;
- g) Monitor the application of the approved annual action plan of the Project.
- h) The PSC will hold quarterly meetings: the Project Management Unit (PMU) will act as the secretariat of the SC

#### **Specific Activities of the PSC**

The PSC receives a detailed progress report every 3 months, depending on the intensity of implementation as well as on a need to discuss urgent matters, which could affect the Project's life. The UNIDO project team (PMU), in cooperation with the Project Manager, prepares the report. The report includes:

- a) A description of the activities planned to take place in the reporting period, and results achieved;
- b) Explanations on any deviations or delays of activities, which were planned and could not take place, or had to be postponed;

- c) A description of all activities planned for the following 3 months, including a projection of results to be achieved, as well as their effect on the overall implementation of the project;
- d) Presentation of challenges or obstacles, which need to be brought to the attention of the donor country and the Government of Ethiopia.

The PCU secretariat will distribute an agenda of the meeting prior to the scheduled meeting, (at least 15 days before), as well as other relevant documentation.

### **Composition of the Steering Committee**

It is proposed that the Steering Committee be composed of representative of the following institutions and organizations:

- Tilahun Kebede                      Head of the Bureau of Agriculture and Natural Resources
- Anesa Melko                         Special Advisor to the President of SNNPR
- Hikma Hayredin                     Head of the Bureau of Women and Children Affairs (BOWCA); SNNPR
- Dr. Nigussie Dana                  Head of Southern Agricultural Research Institute (SARI)
- Eyob Wate                             Head of SNNPR Cooperatives Agency
- Issayas Endrias                     Chief Administrator of Gamo Gofa Zone
- Ezedin Misbah                      Head of Rural Job Opportunity Creation and Development Agency (RJOCD); SNNPR
- Dr. Tsigereda Kifle                 Deputy Director General, Ethiopian Public Health Institute
- Heran Gerba                         Food Medicine and Health Care Administration and Control Authority (FMHACA)
- Dr. Abrham Olana                    Head of the Bureau of Health; SNNPR
- Dr. Getnet Begashaw               Head of the Bureau of Trade and Industry
- Samuel Kekebo                     Head of the Environmental Protection and Forestry Authority; SNNPR
- Ashebir Demse                      Head of the Department of Agriculture and Natural Resource of Gamo Gofa zone
- Mathios Mentamo                    Head of Omo Microfinance Institution
- Tsigereda Tafesse                 Program and Communication Advisor  
Office of the First Lady of the Federal democratic Republic of Ethiopia

- Ginevra Letizia                      Director, Italian Agency for Development Cooperation
- Aurelia Calabro/Lemlem S. Fetene      Project Manager (and Division Chief PTC/AGR/AIT) and CTA from UNIDO

The Chairperson of the Steering Committee is the Head of the BoANR of SNNPRG. The Steering Committee has one secretary, i.e. National Project Coordinator of the project.

### **Meeting Schedule of the Steering Committee**

The Steering Committee meets every 3 months in Hawassa at the premises of BOANR upon availability of its members.

#### **3.7.2      The first Project Steering Committee**

The first Project Steering Committee, held in Hawassa on 10 July 2017, had the following objectives;

1) Review the progress of the project

The meeting was addressed to update on the status of the project activities, challenges and achievements. It was also addressed the importance to evaluate the effective coordination and cooperation among the involved stakeholders and analyse the progress of collaboration modalities between the Moringa Task Force and the MVC project. At this stage, it was deemed important to promote and strengthen the cooperation among the stakeholders, in view of the ambitious targets to be reached in the following months.

2) Review the implementation of the technical activities of the intervention.

In reviewing the project progress, some points were of particular interest due to their technical implications:

- On the base of previous investigations it was determined that the water quality of Chamo Lake, adjacent to the project site, prohibits its use for irrigation. The ground water exploration feasibility study was completed and submitted to the regional government for consideration. Also in this case some clarifications were necessary to overtake some procedural stalemates.
- Establishment of the post-harvest handling unit; the design of the processing unit was provided to the BoANR and forwarded to the concerned authorities of the regional government. Clarifications on the status of approval were also needed.

The time-line of the construction of the post/harvesting processing unit and the drilling of the borehole, motivated concerns on the risk of delaying the implementation of activities.

3) Provide the project with strategic direction to ensure the sustainability of the intervention.

The original project idea has been designed to be take place in five years divided in two phases. The initial pilot phase has the objective of creating a base to construct a long term vision of the moringa role in combating malnutrition and contribute to nutrition security, taking into consideration the economic development of the rural communities. Sharing of ideas and recommendations for the future were other strategic reflections to be shared in the Project Steering Committee.

Followed the result of the plenary session, The PSC has been effective in taking relevant decisions to step-up the implementation of the program (see Annex 2 - Minutes of the meeting).

The regional government defined a tight timeline (two weeks) for finalizing procedures regarding the above mentioned infrastructures;

The Bureau of Women and Children Affairs offered active participation regarding awareness creation and social coaching for the project beneficiaries, in collaboration with the zone and woreda administration;

The Ethiopian Public health Institute (EPHI) underlined the commitment to avoid any communication gap between MTF and MVC Project. EPHI also confirmed the intention of realizing an effective integration and communication with the Ministry of Health. It was also announced a plan to undertake researches, particularly on Moringa *Stenopetala*, to contribute to well-sounded evidence-based decisions and policies.

FMHACA informed the PSC members on the revision process of the existing Proclamation on traditional foods and medicine, under which the legal framework of Moringa should be disciplined. The Authority is awaiting the approval of the revision from the Ministry of Health. The FMHACA representative highlighted that the regulatory decision framework is based on the scientific data provided by relevant institutions. In this regard the role of EPHI has been defined as crucial in the process. FMHCA has already developed a draft proposal and is waiting the following process of authorization. Infrastructure and laboratory capacity building have been defined as essential for the future quality and regulatory control that the institution should conduct in the next future under the new regulatory framework.

The Office of the First Lady (FLO) affirmed the opportunity and possibility of starting the Nutritional assessment in September 2017, with the active contribution and collaboration between Arba Minch and Hawassa University.

Southern Agricultural Research Institute (SARI) has been confirmed as a prime actor in setting an effective coordination between Arba Minch and Hawassa University.

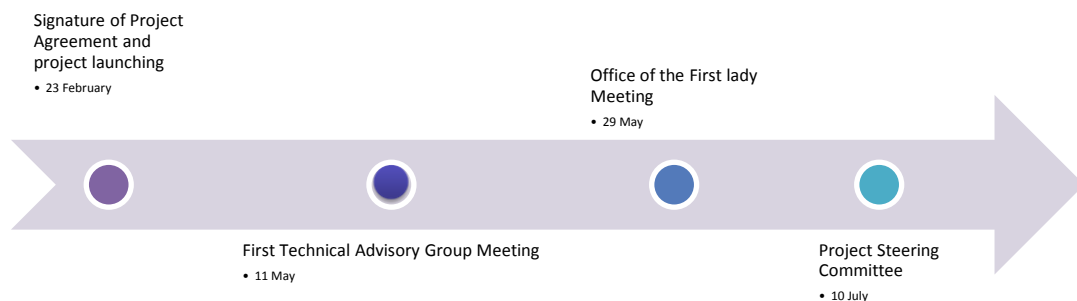
### 3.8 Main updates on institutional process to realize the regulatory framework and the nutritional assessment

To complete the institutional description of the main achievements during the reporting period, the following is a summary on the main updates regarding the complex process of establishing the moringa regulatory framework and set-up the nutritional assessment.

- The Moringa Nutrient profiling process was done by EPHI and the laboratory analysis results for the major nutrition parameters were provided. Moreover, EPHI is on the progress of developing the finger-print of moringa. In this regards the project is supporting the institute to have the capacity by procuring amino acid and fat analyzer which is on the international procurement process of UNIDO.
- The Technical Advisory Group (TAG) meeting of MVC chain project held in Hawassa on the 11 May 2017, deliberated on the following main points:
  - The moringa nutrition profile status; an update on the analysis done by the EPHI;
  - An update on the first regulatory framework, through the FMHACA draft Traditional/Herbal Medicines and Herbal supplements Policy document;
  - Update of the SARI moringa agroforestry research initiative, which is part of the MTF program;
  - The development of the concept note for the community based nutrition assessment, guided by the advisor of the OFL/MoH.
- The nutrition assessment concept note, at the community level, was developed by Hawassa University based on the consciences of the TAG meeting. It was emphasized that the concept note should be developed in close collaboration with EPHI, AMU and the nutrition advisor of OFL (Office of The First Lady). While the concept note was on progress, concern was raised by the MTF saying that the Task force has been working in similar areas of intervention, and there is a need to avoid duplication. Consequently a meeting was held in the office of the FL on 29 June 2017 to clarify the roles and responsibilities of partners and stakeholders and to strengthen the collaboration and communication in order to achieve foreseen goals of the project.
- Following the PSC meeting, an agreement has been reached to achieve a final document on 10 August 2017 between Arba Minch and Hawassa University, with the involvement of the OFL and chairing of the SARI institute.
- The above mentioned Draft Policy Document presented to the TAG meeting by the FMHACA will be the base to develop the regulatory framework for moringa products, such as food supplements. Further discussions are currently on progress to facilitate the way forward to review the policy document and other documents, i.e. quality control manual.
- The Ethiopian Standard Authority developed a draft standard for moringa leaves which is under review by the concerned stakeholders, and expected to be finalized and submitted to the council of ministers for approval.

The above mentioned activities will provide the necessary requirements to develop the national regulatory framework for moringa products and will be base for both national and international certification process.

### Summary of the Main Institutional Milestones of the Project



## 4. Main Activities conducted at field and value chain level

### 4.1 The Selection of Beneficiaries

The beneficiary selection process was designed to be a participatory one, involving relevant institutions and ensuring a climate of trust in the community.

#### Federal and Regional Level

As initial process, a cycle of consultations were conducted with the Office of First Lady (OFL) and BoANR, based on the principle of the importance of stakeholders commitment to create an environment of transparency and accountability.

#### Zonal and Woreda level

Following these first consultations, the joint project team (UNIDO & SARI) drafted some selection criteria in agreement with Gamo Gofa Zone Administrator. Subsequently, the team discussed the proposed criteria with the Woreda Administrator and relevant sector Department Heads - Office of Agriculture and Natural Resource (WoANR) and Office of Youth and Women (WoYW).

As output of the final discussion, the focal persons from the three offices were designated to facilitate and follow up the beneficiaries’ selection at Kebele level.

Finally, the selection criteria were agreed, giving priority to the following conditions:

- The life status of beneficiaries in terms of economic vulnerability, with special attention to single mothers and HHs head women.
- The physical ability to walk long distance to reach the plantation and availability of time left from other daily activities (with attention not to discriminate persons with disabilities). The



ratio for the decision was to avoid the risk that beneficiaries would withdraw from the training once started.

- Gender – the 90% of beneficiaries should have been women (as per point 1) and the remaining 10% could be highly vulnerable male.
- Interest and motivation to participate, to be deeply evaluated by the project team and representative authorities.
- Education level – for the selected beneficiaries at least 10% shall have completed the 8th grade of the national curriculum. These criteria would allow the inclusion, among the project beneficiaries, of a high quota of persons with high school dropouts and low levels of income.
- Distance from Kebele was taken into consideration, to contemplate the logistic constraints related to transportation of beneficiaries’ and the existence of a specific pick up point for transportation.
- Experience of Moringa use at homestead level would have been an important requisite to be selected.

The Selection Process was implemented with the following steps;

- A ‘Woreda selection committee’ was established in Arba Minch Zuria Woreda to facilitate and coordinate the selection of beneficiaries;
- The committee consisted of Woreda Administrator, Head of Woreda Agriculture & Natural Resource office and Head of Woreda Women & Youth office. The Woreda Administrator led the process.
- The selection of beneficiaries was conducted by ‘Melmay committee’ at Kebele level; the ‘Melmay Committee’ consists of religious leaders, community elders, representatives of Health Extensions Worker, Development Agents, Kebele Administrators (two members), and representative of women.
- The approval of selecting beneficiaries was presented to Kebele council (mikir bet).
- After being approved by the *Kebele* Council, the Kebele Administration formally announced the approval to the Woreda administration.
- Once the Woreda received and approved the nominated beneficiaries from the Kebele Administration, the Woreda formally approved the selection.
- SARI and UNIDO actively participated to the process that was finalized at the end of April 2017.

See [Annex 3](#) summarizing the list and composition of the selected beneficiaries.

## **4.2 The starting of the training process and agricultural activities**

Following the selection of beneficiaries, the implementation process of training modules related to moringa value chain started in June.

### **4.2.1. The First Social Coaching**

A first social coaching was implemented and the session took place with participatory approach. Trainers, community representatives and beneficiaries conducted an active discussion. As introductory session, the social coaching aimed at explaining the details of the program and recalled the process related to the beneficiary selection. While explaining the core values of the project, important feedbacks were collected by the participants, in order to better understand their

perceptions and their concerns (see Annex 4 for a list of core questions raised by participants and the general agenda of the social coaching).

The beneficiaries were also introduced to the general principles related to the advantages of improving the use of moringa for nutrition security, receiving first hints on how to process and add value for marketable products and reliable source of income.

The sessions were organized in five days with three groups (for the total of the 110 selected beneficiaries) and saw the active participation of the Arba Minch Zuria Woreda Agriculture & Natural Resource office representative and Arba Minch Zuria Woreda Administrator Representative and UNIDO National Expert. In the session, important arrangements were done to start the following activities of training on the field and nursery activities.



*Fig. 14 and 15 sessions of social coaching*

#### **4.2.2. Training of selected beneficiaries on nursery operation**

The training started on 26 June 2017; the beneficiaries are gradually preparing 20,000 seedlings to be ready in 45-50 days' time for transplanting to the pilot project site.

The nursery management practices cover the following subjects:

- Sourcing, collection and selection of seeds for propagation
- Handling of seeds to hasten germination
- Management practices of germination beds
- Techniques of sowing the seeds in the germination beds
- Pricking out and transplanting
- Weed and pest control.



*Fig. 16 and 17; Nurserying activities; Preparation of planting media and Visit to the field on 5 July 2017*

See Annex 5 to have an idea of the guidelines for the technical nursery activities actually conducted in Wezeka Nursery Site



Fig. 18 and 19, Preparation of seedlings for transplanting to project site

### 4.2.3. Practical training unit on post-harvest handling

The entire post-harvest handling (washing, sorting selecting drying and grinding etc.) training will be conducted on the training unit at Arba Minch Research Centre, that has been modified to serve the said purpose.

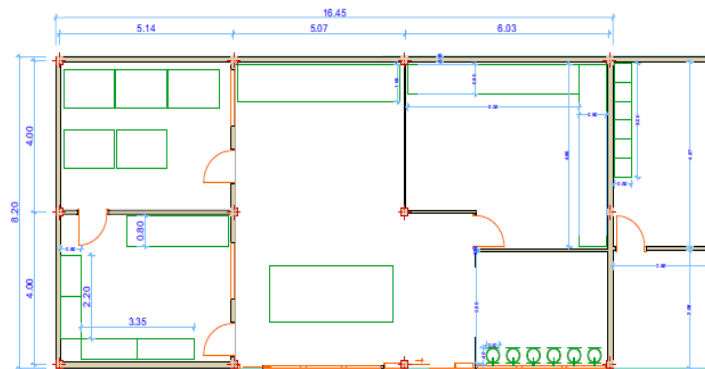


Fig.20; Modified design of the training unit



Fig. 21 and 22; Modified training unit

## 5. Procurement of the equipment, installation and commissioning

The following are the main procurements achieved or planned during the reporting period;

- Project vehicle: The procurement of the project vehicle finalized, documentation processed and the car has been registered. (Registration no. UN-1266)

- Capacity development of EPHI: To equip the laboratory of EPHI with Amino Acid and Fat analyzer, to facilitate the development of moringa finger print and detail nutrition status, technical specifications have been developed and submitted for international procurement process. The set deadline for suppliers is 30 August 2017;
- Evaluation of the water quality of Lake Chamo that has been evaluated as not suitable for irrigation purpose, because of its high pH value. As a result the irrigation scheme had to be redesigned. A new procurement procedure for purchase and installment of the irrigation scheme will be subject to the status of the borehole drilling, which is under discussion between the relevant authorities (BoANR, Southern Water Works Enterprise, Water and Irrigation Development Bureau) of the Regional Government.
- The Oil press machine technical specification has been developed and identification of supplier is on progress. The final procurement process will be finalized as soon as status of the pilot processing unit is clarified.

## 6. Chronogram of activities

		J	F	M	A	M	J	J	A	S	O	N	D
<b>Output 1. A Project Coordination Unit is put in place for a better management of the project initiative in order to get achieve the expected results.</b>													
<b>Activities</b>													
1.1	Set up of the Project Coordination Unit and recruitment of the personnel;												
1.2	Mapping study and baseline study (value chain assessment, training gaps assessment, gender analysis)												
1.3	Gender analysis of the women group involved in the project;												
1.4	Identification of the project beneficiaries;												
1.5	Development of the Monitoring and Evaluation System with gender disaggregated data;												
1.6	Identification of the most suitable areas for the moringa pilot processing line establishment;												
1.7	Preparation of the communication strategy aimed at giving the proper visibility to the project.												
<b>Output 2. The groups active in the moringa value chain are organized, empowered and linked to the local and regional market.</b>													
<b>Activities</b>													
2.1	Organization of the groups active in the moringa value chain with particular attention to women component;												
2.2	Implementation of training modules related to moringa value chain;												
2.2.1	Agreement with Manual developer, practical trainer and theoretical trainer												
2.2.2	Training module development												
2.2.2.1	Social Coaching												
2.2.2.2	Training of moringa leaf processing												
2.2.2.3	Moringa oil processing												

2.2.2.4	Moringa oil value addition													
2.2.2.5	Develop training procedures and manuals based on the concepts and principles of the Food Quality and Safety procedures.													
2.2.3	Training Unit facilities													
2.2.3.1	Design the training unit facility													
2.2.3.2	Selecting and designing training infrastructures/ materials and setting up													
2.2.3.3	Constructing the necessary facilities													
2.2.3.4	Support the training institutes to link with the value chain of Moringa to incorporate the relevant subjects in the training process.													
2.3	Selection of the most suitable technologies for harvest, post-harvest and processing of Moringa and Moringa –based products;													
2.4	Preparation of a market study to let moringa and moringa based products penetrate the local and domestic markets;													
2.5	Creation of direct Market linkages for Moringa and Moringa-based products;													
2.5.1	The preparation of the feasibility study on organic production system of Moringa for the pilot initiative in order to create marketing opportunity and international certification													
2.5.2	The development of GAP, GMP, HACCP, and food safety system protocol													
2.5.3	Development of community based economic structure and sustainable institutional framework; e.g. Out-growers scheme, cooperatives, Private Public Partnership (PPP) etc.													
2.5.4	Develop market outlets and linkages to retailers/wholesalers for processed and semi-processed Moringa products													
2.5.5	Establish linkages with niche international market structure like Slow Food, fair trade, organic food etc.													
2.5.6	Train and develop capacity on the area of GAP, GMP, GHP, and HACCP. Organize on job training and experts visit for experience exchange													
2.6	Preparation of promotion material and communication toolkit about moringa value and utilization.													

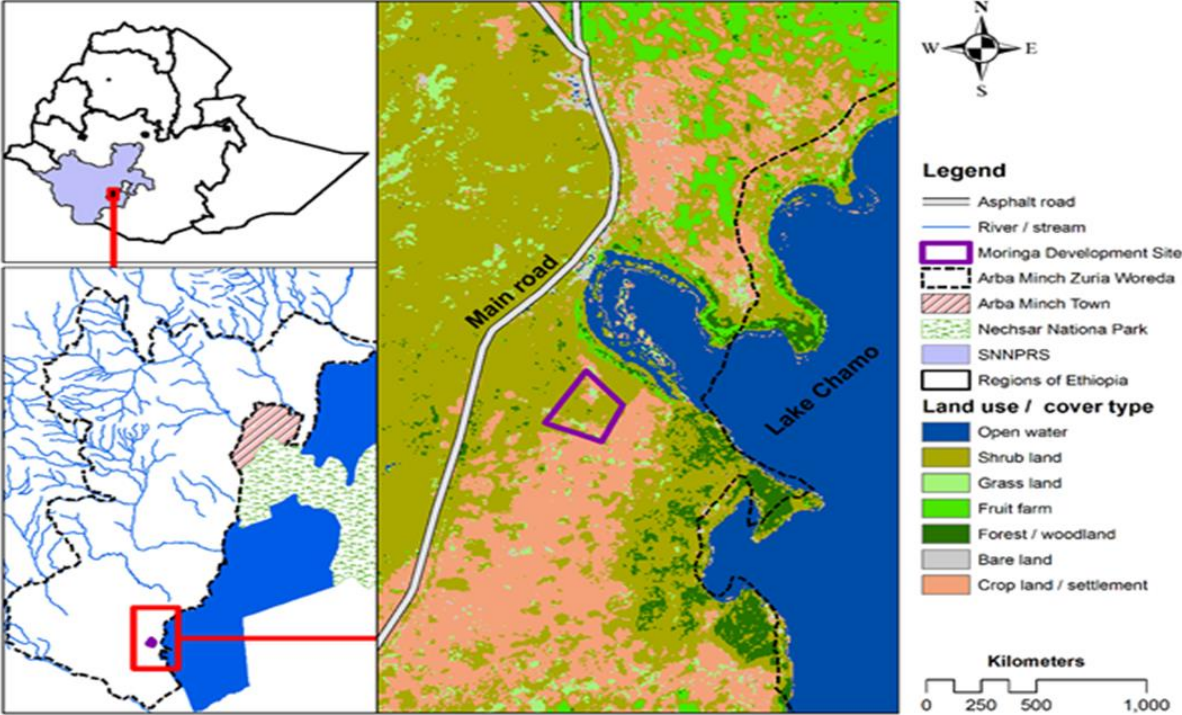
Output 3. A pilot processing line for moringa and moringa based products (i.e. oil, tea and nutraceuticals) is put in place.												
Activities												
3.1	Planning, purchasing, installation and test of the machineries of the pilot processing plant for the processing and packaging of moringa and moringa based products;											
3.1.1	Setting up the processing plant on project site											
3.1.1.1	Selecting the designer of the pilot project site											
3.1.1.2	Follow up the design process;											
3.1.1.3	Submitting the design for the SNNP Regional Government											
3.1.1.4	Follow Draft processing of pilot processing unit has been already submitted to the BoANR for review.											
3.1.1.5	Equip the unit with environment friendly energy source, such as solar or wind power.											
3.1.1.6	Equip the units with appropriate processing and packaging equipment for moringa-based products											
3.1.2	Land development											
3.1.2.1	Identify the project sites for production											
3.1.2.2	Demarcation and surveying of the Project site											
3.1.2.3	Land clearing											
3.1.2.4	Topographic survey											
3.1.2.5	Land preparation											
3.1.2.6	Water and soil analysis											
3.1.2.7	Irrigation system selection											
3.1.2.8	Selection of appropriate irrigation technics											
3.1.2.9	Selecting the irrigation scheme supplier											
3.1.2.10	Setting up the irrigation infrastructures											
3.2	Training of the technical staff appointed for the management and maintenance of the processing line.											

<b>Output 4. The Ethiopian Public Health Institute is empowered for undertaking quality certification activities on Moringa based products.</b>													
<b>Activities</b>													
4.1	Preparation of moringa quality control manuals based on international recognized standards;												
4.2	Support to the Ethiopian Public Health Institute (and other stakeholders) staff dedicated to the moringa value chain for the quality certification;												
4.2.1	Finalizing the TOR for the procurement of the Amino Acid and Fat analyser; requested by EPHI												
4.2.2	Follow up the status of moringa leaves standards												
4.2.3	Follow EPHI process of developing the finger-print of moringa												
4.2.4	FMHACA: Follow Draft Policy Document presented to the TAG meeting by the FMHACA as well as revise the plan and budget requested;												
4.2.5	Follow the Ethiopian Standard Authority developing process of the draft standard for moringa leaves												
4.3	Set up of a laboratory dedicated to the quality analysis and certification based on international recognized standard.												
4.3.1	Equip the lab of EPHI necessary for the quality and standard parameters determination.												
<b>Output 5. Food security of the targeted households is improved.</b>													
<b>Activities</b>													
5.1	Promotion of Moringa Utilization in household nutrition habits in local communities												
5.1.1	Concept note approval and nutritional assessment												
5.1.1.1	Review and approval to start a baseline assessment of economic and nutritional status of pregnant and lactating women and under-five children												
5.1.1.2	Conducting Nutritional assessment												
5.1.2	The development of a protocol for nutraceuticals derived from Moringa												



5.1.3	Development of moringa based food and food supplements with special emphasis on PLW and children under 5												
5.1.4	Development of moringa recipes to diversify food												
5.1.5	Determination of minimum/ max levels of moringa consumption to achieve optimal requirements for children/ PLW and avoid potential toxicity.												
5.1.6	Distributing seed and inputs to the communities												
5.1.7	Support the communities to benefit from Moringa as food supplement.												
5.1.8	The preparation of the road-map for the Moringa VC, to scale up the project from its pilot initiative to full-scale (4 years), with special emphasis on the nutrition component.												
5.2	Introduction of Moringa as animal fodder for the agro pastoralist of the targeted area.												

# ANNEX 1. Map of the Project Site



## ANNEX II Minute of the First Steering Committee



*Minute of the First Steering Committee meeting of the project entitled:  
“Project for the development of Moringa Value Chain (MVC) in rural communities in Ethiopia”*

**Venue:** Hawassa- Southern Nationals and Nationalities and Peoples Regional State (SNNPRS)

**Date:** 10 July 2017

### 1. Members of the Project Steering Committee present:

1.	H.E. Roman Tesfaye	FL of FDRE
2.	Mr. Tilahun Kebede	Head, Bureau of Agriculture and Natural Resources-SNNPRS
3.	Ms. Ginevra Letizia	Director, Italian Agency for Development Cooperation
4.	Ms. Aurelia Calabrò	Division Chief, PTC/AGR/AIT- UNIDO
5.	Dr. Abreham Alano	Head, Bureau of Health-SNNPRS
6.	Ms. Hikma Hayredin	Head, Bureau of Women and Children Affairs -SNNPRS
7.	Dr. Nigussie Dana	Director General, Southern Agricultural Research Institute
8.	Mr. Eyob Watte	Head, Cooperatives Agency-SNNPRS
9.	Mr. Issayas Endrias	Chief Administrator, Gamo Gofa Zone, SNNPRS
10.	Mr. Ezedin Misbah	Head, Rural Job Opportunity Creation and Agency - Development SNNPRS
11.	Dr. Tsigereda Kifle	D/Director General, Ethiopian Public Health Institute
12.	Ms. Heran Gerba	D/Director General, Ethiopian Food and Medicine, HealthCare Administration and Control Authority
13.	Mr. Mathios Mentamo	Head, Omo Microfinance Institution
14.	Dr. Getnet Begashaw	Head, Bureau of Trade and Industry
15.	Mr. Ashebir Demissie	Head of the Department of Agriculture and Natural Resource of Gamo Gofa Zone -SNNPRS

## **Project Support Team:**

<b>1.</b>	<b>Dr. Ferew Lemma</b>	<b>Nutrition Advisor/OFL and MOH</b>
<b>2.</b>	<b>Mr. Noah Degu</b>	<b>Chief of Staff/OFL</b>
<b>3.</b>	<b>Mr. Meskele Lera</b>	<b>Health Advisor/OFL</b>
<b>4.</b>	<b>Mr. Getahun Yacob</b>	<b>Focal Person of the MVC-SNNPRS/SARI</b>
<b>5.</b>	<b>Dr. Lemlem Sissay Fetene</b>	<b>Chief Technical Advisor/UNIDO</b>
<b>6.</b>	<b>Dr. Alice Perlini</b>	<b>Agro VC Consultant/UNIDO</b>
<b>7.</b>	<b>Mr. Gianfranco Pulinas</b>	<b>Strategic Advisor/UNIDO</b>
<b>8.</b>	<b>Ms. Misgana Elias Kallore</b>	<b>NPC/UNIDO</b>
<b>9.</b>	<b>Mr. Daniel Dessalegn Kifle</b>	<b>National Expert/UNIDO</b>

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## **Project Steering Committee members absent:**

- ✓ Mr. Anesa Melko      Special Advisor to the President of SNNPR
- ✓ Mr Samuel Kekebo      Head, Environmental Protection and Forestry Authority/  
SNNPR

## **2. Agenda**

- I. Welcoming the PSC members
- II. AICS intervention, welcoming note
- III. UNIDO intervention on the main milestones of the project
- IV. MVC Project activity progress report
- V. PSC members interventions (Comments and discussion )
- VI. Closing remarks

## **I. Opening speech to the PSC members**

The participants were welcomed by the opening speech of Mr. Tilahun Kebede, the Chairman of the Project Steering Committee, in which it was underlined the importance of the project in terms of the economic empowerment of the targeted beneficiaries, rural women of Wezeka Kebele, Arba Minch Zurai Woreda, and the contribution of MVC project for food and nutrition. Furthermore, it was also emphasized that the project will have remarkable contribution to the efforts of agricultural transformation.

The establishment of the pilot processing unit has been reconfirmed as a commitment of the Regional Government, and concerning the technical details, the Chairman invited the relevant stakeholders for an open discussion to present their comments. The contribution of the Italian Government and the AICS in the funding of the project was strongly emphasized by the Chairman and the hope to further strengthening the partnership between the two parties was also mentioned. In addition, acknowledgement of the dedication of the project management team, and progress of the project was also pointed during the opening speech.

## **II. AICS intervention, welcoming note**

Ms. Ginevra Letizia, Head of AICS Office in Ethiopia, reiterated the interest of AICS on the Project as it addresses women economic empowerment, as well as fighting malnutrition which is the main focus for AICS in general. National and international institutions networking and partnership to develop moringa products standards and quality certification was also emphasized. Ms. Letizia indicated that in principle, AICS support would go beyond the remaining six-month time of the Project, and she highlighted the importance of combining the traditional knowledge with innovation, to create a win-win situation.

## **III. UNIDO intervention on the main milestones of the project**

Ms. Aurelia Calabrò, Chief, PTC/AGR/AIT UNIDO, started her intervention by acknowledging Her Excellency W/ro Roman Tesfaye for her unreserved support and commitment to support the project to meet the set objectives. She also appreciated the financial support and partnership the project has with the AICS, she indicated that AICS is not only a donor for this project, but a partner. The Project Manager also informed the participants that most of activities have started. She also clarified that UNIDO as facilitating agency, bridges the gap by bringing the necessary skills to make the project feasible; yet there are some actions that would need decisions from the local stakeholders (e.g. borehole drilling). She also commented that the PSC would deliberate on the project sustainability.

## **IV. MVC Project activity progress report**

Progress report was presented by Dr. Lemlem Sissay, UNIDO CTA. The presentation emphasized on setting up the regulatory framework as a crucial element in achieving the overall objective of the Project, i.e. improving nutrition and economic status of rural women. The presentation followed the expected output of the Project' and the first Technical Advisory Group meeting held on 11 May 2017.

1. The groups active in the moringa value chain are organized, empowered and linked to the local and regional market;

- a. Beneficiaries selection process has been completed;
  - i. 110 beneficiaries were selected from *Wezeka kebele*, following the selection criteria's developed through the involvement of all relevant stakeholders, and involving grass-root level community structure;
  - ii. social coaching and motivation training was conducted with active participation of all beneficiaries;
  - iii. Implementation process of training modules related to moringa value chain has started, (training on nursery operation, identification of trainers in specific area of the VC, development of training manuals etc.)
  
2. A pilot processing line for moringa and moringa based products (i.e. oil, tea and nutraceuticals) is being put in place:
  - a. Finalization of the demarcation of the pilot project site and land development;
  - b. Surveying of the 5 ha demonstration plot is completed;
  - c. Draft design of processing unit for pilot initiative has been submitted to the BoANR for review;
  - d. Irrigation water source, borehole location and cost implication has been indicated;
  
3. The Ethiopian Public Health Institute and partners are empowered for undertaking quality certification activities on Moringa based products:
  - a. The moringa nutrition profile analysis was processed by EPHI;
  - b. finger-print development of moringa is on the progress (by EPHI)
  - c. The MVC project is supporting EPHI to strengthening the capacity by procuring lab. equipment; amino acid and fat analyzer;
  - d. Traditional/Herbal Medicines and Herbal supplements draft Policy document has been developed and presented by the TAG member from FMHACA. Request note has been submitted to verify the draft document and strengthen the technical capacity of the institute through experience exchange training.
  
4. Improvement of food security of targeted households:.
  - a. Concept note development for the community based nutrition assessment, guided by the advisor of the OFL/MoH, is under discussion with Hawassa and Arba Minch Universities.
  - b. Strengthening partnerships with international institutes such as, ISS - *Istituto Superiore di Sanità*, Bill and Melinda Gates Foundation – nutrition & agriculture programs, Children Investment Fund Foundation, University of Wisconsin –linked/ working with OFL, Experience sharing from Ghana –

through the Food and Drug Authority of Ghana are opportunities to be considered.

During the presentation Ms. Letizia made a comment that the certification should give emphasis on the nutritional component, rather than the economic and market component. She expressed her concern about focusing on the economic value would provide an opportunity to men to take over the moringa value chain development, thus undervaluing women; therefore, to empower women it is necessary to more put emphasis on the nutrition values before starting promoting moringa commercially. While saying that Ms. Letizia underlined the considerable economic value of moringa oil in the cosmetics industry.

### **Challenges for the achievement of activities in the next six month:**

- **Infrastructures:**
  - **Water quality:** The quality of *Chamo* Lake prohibits using it for irrigation. Therefore, alternative water source is needed. The ground water exploration feasibility study has been conducted and submitted to the Regional Government for consideration.
  - **Establishment of the post-harvest handling unit:** the design of the processing unit has been provided to the BoANR which is forwarded to the concerned authorities of the regional government, which need a quick response and decision making.
  
- **The effective coordination and cooperation among the involved stakeholders:**
  - Decision on the collaboration modality between the Moringa Task Force and MVC project, was requested to strengthening the cooperation in the remaining months of the intervention;
  - The nutrition assessment concept note, at the community level, has been developed by Hawassa University based on the TAG meeting findings. It has been emphasized that the concept note should be developed in close collaboration with EPHI, AMU and OFL.
  
- **Strategic direction to ensure the project sustainability;**
  - Establishing a base to construct a long-term vision of the moringa's position in the economic development of the rural communities, in combating malnutrition as well as contributing to nutrition, as the original project has been designed to implement in 5 years (two phases program). Thanks to AICS, the initial pilot phase is working to lay the ground.
  - Sharing of ideas and recommendations for the future can be an important point of discussion.

Her Excellency W/ro Roman Tesfaye while appreciating the progress of the project underlined that all actors are partners to one goal and therefore, commitment should be clearly made, in terms of time, resource and risks that could be faced at all level in the achievement process of the Project outcome.

## V. Intervention of PSC members:

**Commitment of the regional government in terms of finalizing the processing Unit and facilitating the irrigation water source:** H.E. Mr. Tilahun committed to take the assignment with Dr. Getnet, Head, BOI to facilitate the preparation of the prepare Bill of Quantity of the processing unit and present it to the President of the Regional Government for funding within two weeks period. It is also indicated that feasibility study and bill of quantity, for the borehole drilling, prepared by the Gamo-Gofa Zone Water and Mining and Energy department will be verified in two weeks' time by the Water and Energy Bureau, and will be part of the request to the Regional Government cabinet for funding.

**Regional Health Bureau:** will promote better nutrition practices in Moringa Value Chain project area using health extension workers and health development army as integral part of their activities.

**Bureau of Agriculture and Natural Resources:** will also promote Moringa production by smallholder farmers to avail adequate quantity for household food consumption as MVC project gets implemented.

**Bureau of Women and Children Affairs:** Ms. Hikma offered to provide awareness creation and social coaching training together with zone and woreda administration for beneficiary women in order to reduce dependency syndrome and enhance motivation.

**Ethiopian Public health Institute (EPHI):** Dr. Tsigereda made a commitment that EPHI will work on avoiding once and for all a communication gap and to bridge a better communication between MTF and MVC Project. The research activities on *Moringa Stenopetala* should contribute for evidence based development strategy and decision making.

**FMHACA:** Ms. Heran Gerba, informed members that the Proclamation of FMHACA is under revision and it might follow the internationally accepted Food and Drug Authority guideline. She indicated that the revision of the proclamation shall cover the policy of the traditional food, medicine and food supplements. She highlighted the challenge with setting a regulatory decision made upon the data provided, therefore, EPHI' contribution is crucial to quicken the process. In addition, Laboratory & infrastructure support is needed to test the production is beyond market certification.

**FLO:** Dr. Frew informed that the Nutritional assessment will start in September 2017. Arba Minch University and Hawassa University shall work on the assessment together.

**SARI:** In terms of setting a defined communication structure and coordination between Arba Minch and Hawassa University, it was suggested for SARI to lead the coordination and the two advisors of the FLO (Dr. Ferew and Mr. Meskele) to participate in the technical advice/supervision. Furthermore, Dr. Negussie also agreed to take part.



## **VI. Closing remarks:**

Lastly, the First Lady made a note that MVC is the first project of its kind; therefore the success of the Project might lead to the involvement and consideration of other underutilized crops.

- Currently the issue of malnutrition is critical, and many children have been affected even in moringa producing areas.
- Stronger partnerships in order to achieve the project goal.
- A multi-purpose plant like Moringa needs special attention.
- In order to assure sustainability of the operations, the project requires to be extended. UNIDO will present a letter with proper justifications to AICS.
- Awareness creation on the nutrition values of moringa among beneficiaries should be initiated following the advice provided by Ms. Perlini.
- Keep on following up on the realization of the borehole drilling and the pilot processing plant unit.
- Complete the process for the nutrition profiling as described above and finalize the community-based nutrition assessment.
- It was also decided that the next PSC be organized, possibly in Arba Minch, in October (date to be defined).

Meeting adjourned at 13:00.

### ANNEX III. List of Beneficiaries

No of Trainees 110							
98 - WOMEN							
12 - MEN							
EDUCATION			AGE		Marital Status	Home Address	
Elementary school 1 -5 grades = 54			14 - 20 age - 30		Single - 24	Gadade - 37	
Junior high school 6 - 8 grades = 10			21 - 30 age - 50		Married - 80	Qolesa - 32	
High school 9 - 10 grades = 20			31 - 40 age - 25		Divorced - 1	Tsenaou - 41	
Never went school = 18			41 - 50 age - 3		Widow - 5		
Unknown = 8			above 51 age - 1				
			unknown - 1				

## ANNEX IV. Social Coaching

(Introduction of the Project and motivation)

**Place of Meeting and Date:** Wezeka Kebele, 17 & 19 – 23 June 2017

Proposed Agenda Items for all groups:

1. Opening Session
  - a) Welcoming the Selected Beneficiaries and introduction of moderators, *Daniel Kifle, Ato Abel and Ato Abenet*
  - b) Briefing on the Objectives of the meeting and providing information on project progress; *Ato Abenet*
2. Introducing and briefing of the overall Project profile, *Daniel*
  - a) Origin of the project
  - b) Background information of the Project
  - c) Involvement of different stakeholders at National and Regional level
  - d) Explanation of The overall Project monitoring body as represented by the Steering Committee (PSC)
  - e) Presentation of the implementing partner of the Project (UNIDO)
  - f) Presentation of the project funding (AICS)
  - g) Briefing of targeted Area/Location for the Project ( according to Inception phase report)
  - h) Briefing progress of the Project.
3. Clarification on the project objectives & outputs and progress of the project activities, *Daniel Kifle*.
4. Clarification on the Selection Criteria and Selection Process, *Ato Abenet and Ato Abel*
  - a) The Beneficiary selection process was explained illustrating the participatory approach that involved relevant institutions. Briefing was given regarding the involvement of Federal, Regional, and regional Level, Zonal and Kebele Level.
  - b) Briefing on criteria of selection (role of Kebele Melimaye Committee and Development Group leaders)
5. Clarification on about core values of the Project, *Daniel Kifle*

- a) Role of project activating f women empowerment and economic integration;
- b) pro-women growth as core of this project;
- c) job creation and capacity development of the beneficiaries, as other focal points;
- d) explaining importance of value-chain development strategies, targeting agro-processing and related activities;

**6. Clarification on critical point: *Daniel, Ato Abenet and Ato Abel***

Clarifications and sharing regarding how the selected beneficiaries will get benefit from the Project: Focus on the Community based economic empowerment.

**7. Discussion with the Group:**

Discussion outputs:

- Majority of participants got opportunity to introduce themselves to the group;
- Different Questions and Suggestion was raised by participates. please see below Appendix 1:
- The team observed most of youth women were not actively participated at the time of discussion; The Kebele Administrator suggestion that the situation was due to “lack of experience to talk loud and fear of afraid of expressing personal feelings”.
- The team developed a format to collect background information for each of the participants. Please see below appendix 2



Figure 1. Meeting at Wezeka kebele Compound with all selected beneficiaries



Figure 2. Meeting at Wezeka kebele Compound with all selected beneficiaries

#### Appendix 1 List of main questions and comments raised by the participants

- a) Number of working (training days) and working hours per day?
- b) Majority of participants are women and engaged with home duty and baby care (some of them are lactating mothers). How they will accommodate their usual activities to the project activities?
- c) Possibilities to assign another person from neighborhoods/ relatives to work for them if they are engaged with Home works/ sick/ social problems
- d) **Means of Transportation:** means of transport to project site (10km from the Kebele) and for the training to Arba Minch. Expensiveness of using public transport and difficult to travel to project site by walking (especially women).
- e) Discipline of the absence from work due to personal and social problems (mourning, holidays,)
- f) Clarifications on maternity leaves?
- g) Clarifications on sick leaves?
- h) Guarantee to participate to the project with the respect of individual point of view (ownership of the project) *“Most of us are uneducated people; easily dominated by educated one”*.

One of the beneficiaries expressed his feeling by saying one proverb” *Ox/Bull ploughs to land and Donkey eats the product”*.

- i) **Majority of participants’ questions:** “Target of the project is community based economic empowerment and not salary based. How can we survive and find means of

income for daily base activities?” ”If we spend a time to work on this project our children expects something from us e.g. food after work”.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

BENEFICIARIES BACKGROUND INFORMATION

Date:

Name \_\_\_\_\_ Tel \_\_\_\_\_  
Gender  Male  Female  
Number of people living in the household Adults \_\_\_\_\_ Children \_\_\_\_\_  
Age \_\_\_\_\_  
Marital Status  Single  married  widow  other \_\_\_\_\_  
Level of education  never went to school  Primary school  High School  
No of family members \_\_\_\_\_  
Your Role in income generation for your family \_\_\_\_\_  
Why are they part of the project \_\_\_\_\_  
Are you participating voluntarily? \_\_\_\_\_ any pressure? \_\_\_\_\_  
What would they think regarding their contribution \_\_\_\_\_?  
How long they think the project will established and help generating incomes \_\_\_\_\_  
What do you expect from the trainings? \_\_\_\_\_

Success parameters at community level

- Who is successful \_\_\_\_\_
- What are kinds of achievements do you consider as success? \_\_\_\_\_

## ANNEX V - Guidelines for the nursery activities (Wezeka Nursery Site)

The concept of proper (plant) selection is based on the following principles:

- A parent tree with desired qualities is capable of producing offspring with similar performance
- The performance of the seedlings may be predicted based on the performance of the Parent materials

Seed collection and sowing

- Always collect seeds from plus trees or phenotypic ally superior trees.
- A chart should be prepared in each nursery indicating the seed collection period of local or preferred tree species along with the location of such plus trees. Seedlings developed from poor or abnormal trees will never produce good trees.
- After collection, seeds should be processed carefully otherwise they may become damaged and lose viability.
- Most of the seeds have short viability; therefore, sowing should be done immediately after collection and processing.

Viability test using floating method

- Fill a jar about three-quarter way with water
- Pour seeds into the water-filled jar
- Seed separation takes place: some will float while others will sink  
Sinkers are viable while floaters are not

Setting up the polybag nursery

- Clean the area and remove all plant debris, weeds and other unwanted plants.
- Prepare polybags from the polybag sheet roll or buy the preferred size.
- Fill the perforated bags with loamy soil (compost, fine sand, top soil in a ratio of 1:1:1) or forest soil, collected from the top layer below the litter layer.
- Arrange the polybags in single rows.

Fence the perimeters properly to ensure safety of the plants against stray animals or intruders