

**MINISTRY OF AGRICULTURE
SUSTAINABLE LAND MANAGMANT PROGRAM**

**HANDING OVER AND BUSINESS PLAN DEVELOPMENT GUIDELINE
FOR PROJECT FINANCED NURSERIES**

**(Internal Working document version for SLMP National and Regional Program
Coordination Units)**

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Acknowledgements and Forward

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Acronyms

AGP	Agricultural Growth Program
CRGE	Climate Resilient Green Economy
EPRDF	Government of The Federal Democratic Republic of Ethiopia
GTP-II	Growth and Transformation Plan- II
IGA	Income Generating Activities
KWT	Kebele Watershed Team
MoA	Ministry of Agriculture
NGO'S	Non-Governmental Organizations
NPV	The Net present value
PAD	Project Appraisal Document
PCDP	Pastoral Community Development Project
PIM	Project Implementation Manual
RJOC	Rural Job Creation Opportunity Strategy
RLLP	Resilient Landscape and Livelihood Project
RORT	Rate of Return Total
SLMP	Sustainable Land Management Program
SLMP-I	Sustainable land management program, phase one
SLMP-II	Sustainable land management program, phase one
SME	Small and Medium Enterprise
TC	Total Cost
TR	Total Revenue
WSC	Woreda Steering Committee
WTC	Woreda Technic committee

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Part-I: Handing Over of Central Nurseries to Community

1. Background

Nurseries are the primary activities for any forestry development/biological restoration activities that are established prior to any biological soil and water conservation activities. They are the centre for sourcing planting materials for any kind of plantation based conservation activities. Nurseries should be established with strict planning that can be modified depending on need of planting materials by a program. Nurseries can be categorized as private, community, institution and government (central) based on the size and type of ownership. Therefore, central nurseries are designated as part of government owned nurseries but managed by sustainable land management program due to the fact that they are large by size, require huge investment and well established in terms of techniques and serve as model for other kind of nurseries.

A nursery site is a properly managed site, designed to produce trees, fruit seedlings and forage seedlings including grass splits grown under favourable conditions until they are ready for transplanting/planting. Nurseries are a key success factor for sustainable watershed development. Nurseries may vary in size, facilities (supplies, tools, equipment, etc.), types and production capacity and longevity. Experiences from Sustainable Land Management Program indicated that production capacity of individual or family-run nurseries typically produced from 50 to several thousand seedlings in each season. Large Woreda or government nurseries (central nurseries) can produce millions of seedlings/season or more as per annual planting material demanded.

Central nurseries are fully established and operated by project resources, supervised by Woreda office of agriculture to provide quality tree seedlings and grass splits to communities and farmers. They are designed to operate for a longer period of time compared to other nursery types (Community, private and Institution)¹. The production capacities of those nurseries are dictated by project targets and usually can reach millions of seedlings/splits. They may also serve as sources of seeds and seedlings for smallholder nursery operators (individual and group nurseries).

¹ **Community/ self-help group** - Community/ Self-help established & owned by community groups or highly supported by the project as a replica of central nurseries satisfying demand of the project that could supplement capacity of central nurseries where planting sites are very far from central nurseries

Private Nurseries - Private or Individual nurseries are also known as household nurseries or backyard nurseries and are generally established and managed by individual farmers and/or their families.

Institution Nurseries- Intuition nurseries in Ethiopia are mainly school nurseries and nurseries established at Farmers training centers (FTCs), Churches and mosques.

Central nurseries have access to technical information and resources produced by research institutions and different donors. Hence, they have better capacity to offer technical training for the target community, institute and individual nursery development initiatives. Thus, central nurseries are model nurseries for other kind of nurseries in terms of capacity, specialization, resource supply, and planning and execution capacity, and management or leadership quality to achieve its anticipated objective. In addition to their production and multiplication function of planting materials; central nurseries can also serve as income generating opportunities for the operators and enhance the social capital, technical capacity and leadership skills of communities. They can also serve as centre for capacity building and source of seedlings for multiplication for nurseries owned by farmers, private and institutions, especially for the species that are difficult to be accessed by other type of nurseries.

Sustainability of central nurseries is highly depends on the investment from government or support from projects working on landscape development. Life spans of those nurseries are directly related to availability of budget from the government or duration of project which is mostly not more than 5- 7 years. Unless there is investment, no central nurseries are operated or managed by communities who are the ultimate beneficiaries in the watershed. It is known that a government program like SLMP has specified time with the objective of introducing new technologies and approaches. The assumption behind is outputs shall be maintained and continued by the community which are beneficiaries of both the technology transfer and other income generating incentives. The program has supported those activities for the last 12 years and will be phased out after 2024. In this case; there is a need to think on how to establish systematic handing over of those nurseries to the community to manage for sustainability and use the nurseries as an asset to ensure continuation of seedlings production for any type of planting materials demand. It is obvious that programs like SLMP have specified scope, time and budget; therefore established system shall be handed over by responsible institutes and scaled up in terms of technology and coverage. Central nurseries also do not have different fate as that of the program but it should continue to provide the required service though the management and ownership role shifted (handed over) to community.

This guideline is mainly prepared to provide direction how to handover the management responsibility of the nurseries to communities/ organized business groups at local level in order

to ensure sustainable planting material supply for watershed development while creating additional income sources for certain groups within the community. It refers to central nurseries which can be handed over legally to groups/ community and will be sustainable income source and best planting material suppliers in and out of the surrounding community (direct and indirect beneficiaries of SLMP).

2. Objectives

The main purpose of this guideline is to handover central nurseries strategically to the community through carefully planned business model to sustain the role of nurseries by serving as an alternative livelihood source while contributing to landscape restoration and greening initiatives of government and development partners by supplying appropriate quantity and quality of seedlings. Specifically to;

- Sustain the role of central nurseries with their full capacity and production potentials
- Scale up (handover) project level seedlings production experiences to community
- Develop a lesson that nurseries also support livelihood diversification with appropriate business planning model under project related budget constraints for sustainability
- Handover nurseries for broad impact after existing project and budget sources ended

3. Policy and Strategies Framework

National policies, strategies and institutional framework in support of creating green development by engaging available manpower, encourages especially youths to contribute to the country's economy by creating jobs and participating them in farming and non-farm activities that could change/diversify their livelihoods; further contribute to the country's economy. The Federal Democratic Republic of Ethiopia underscores one basic objective with regard to economic development which is to build a market economy in which a broad spectrum of the Ethiopian people are beneficiaries, dependence on food aid is eliminated and rapid economic growth is assured. This market economy objective has four elements. First, accelerated economic growth is incorporated as a fundamental goal and a point of departure. Second, the objective is not limited to rapid economic growth but extends to broad-based growth in which most of the population is able to benefit. The third element seeks to improve the country's position in the

global economy moving away from the current status as an international alms recipient to progressively take part in the global integration process. On the fourth score, the objective is to realize accelerated economic development in the context of an economic system characterized by market orientation.

Given the rural nature of most livelihoods in Ethiopia, fulfilling the above economic development objective requires a comprehensive rural development vision as well as practical action to realize it. Given, moreover, the dominance of agriculture in the Ethiopian economy, the rural development effort is presently associated with agricultural development. This, however, does not in any way imply that development effort in rural areas will be limited to agricultural development. Indeed, in order to facilitate agricultural development, there is a need to undertake rural infrastructure and social development programs. Furthermore, trade and industry will build on developments in agriculture and should emerge within the rural areas as well as expanding in an urban context. Hence, rural development although admittedly centered on agricultural development, is not confined to it.² The rural and agriculture-centered development strategy supports to create a situation in which productive capacity of the population will be upgraded and deployment of such capacity in productive activities shall be facilitated.

All government policies and strategies that exist and those to be evolved are implemented under the umbrella of GTP II and CRGE, towards attaining Ethiopia's vision. Thus, the Rural Job Opportunity Creation Strategy is not an exception. It is, therefore, obvious that to integrate the RJOC Strategy and resultant programs and initiatives will integrate and create synergy with the existing and evolving national policies, strategies, plans and programs. While the policies, strategies and programs with no doubt play important role in creating jobs, the RJOC needs to be aligned with and benefit from their objectives and performances. RJOC programs, initiatives and performances in turn reinforce the intended success of each policy, strategy and programs. Over the last years, the Ethiopian Government has implemented various policies, strategies and programs aimed at improving the livelihood of the rural population. However, their contribution in promoting job creation has not been significant as they have not properly incorporated job opportunity creation by design. According to Job creation strategy document (2018), the government interventions that have immense potentials to rural job opportunity creation are

² Federal Democratic Republic of Ethiopia Agricultural and Rural Development Strategy

those National Flagship Programs and livelihood interventions supported by several non-government organizations, which include: Productive Safety Net Program (PSNP), Sustainable Land Management Project (SLMP), Agricultural Growth Project (AGP), Pastoral Community Development Project (PCDP), Livelihoods Diversification Interventions and On-Going Job Opportunity Creating Efforts in Urban Areas.

Furthermore, Ethiopian economy largely dependent on natural resource (land, water) and human capital that should well organized and supported with different policy framework. As it has known, more than 83% of population is located rural areas that have both advantage and disadvantage depending on production and economic perspective. As an advantage, an increased population provide cheap labour for private as well as mechanized agriculture that may attract Foreign Direct Investment in the agriculture. In the other way, it has disadvantage as the agriculture system is low input and lower production that focused for self-consumption than market oriented. There is high accumulation of population at rural areas, especially in areas which expected to cover national demanded of agricultural product but it is difficult to have surplus harvest that can cover urban market demand as it should fulfil local demand. Thus, rural job creation strategy should be in a place and has multiple benefits for the national economy.

Natural resource management, especially land and forest management can create rural job if it is well supported with workable policies and institutional set-up. The national forest policy has stated many benefit packages for anybody interested to participate in forest related activities. They include but not limited, such as tax relief, input supply and technical support as per the request. **Sustainable Land Management Program (SLMP)** has the objective of improving the livelihoods and economic well-being of the country's smallholder farmers, herders and forest resource users by scaling up sustainable land management practices with proven approaches and practices to restore, sustain and enhance the productivity of Ethiopia's land resources. The implementation of SLM program is largely supported by community mobilization, and engaging several workforces. The motivation created in community mobilization in natural resource conservation by pursuing activities such as stabilization of degraded lands, watershed management, and reduction of tillage has led to constructive lessons in the implementation of the

RJOC strategy.³ Experience from successful SLMP interventions highlighted that access and availability of different planting materials is among the success factors in sustainably restoring degraded landscapes. Thus engaging community members in the production of planting materials in the watersheds could create alternative income source and jobs to the community members as well as ensure sustainable supply of some of the inputs for program activities. Therefore SLMP take the initiative to prepare this guideline to serve as reference based on its experience through its implementation which may serve as a reference and can be developed or scaled-up upon various experiences observed by different actors at national level.

4. Rationales of Developing the Guideline

It is obvious that projects have defined life span with accomplishing defined activity within as specified budget, quality and schedule, however its impact continuous after the project has completed. Therefore, projects outputs handing over process is not something that should be done instantly rather should be planned a head and shall be done gradually as per its plan within projects' active period to make possible adjustment and support on process. Routine activity such as nursery and watershed management need strong care before it will transfer to user groups as it needs serious follow-up and knowledge transfer to the community to assure its sustainability. Now days, it is common to see private nursery at farmer level, mainly for private consumption as well as marketing of seedlings.

There are also practical experiences that showed farmers have established nurseries for commercial purpose, especially for Eucalyptus, Graviaia, Bamboo and different fruits. For instances, farmers in Awi zone of Amhara Regional sate are known for producing bamboo seedlings on their nursery and sale thousands of seedling for government and other development programs. Thus, considering any similar experiences in other SLMP Regions, we can conclude that handing over of nurseries to the community will be feasible model building on lessons that can be specialized with technical, strategically and institutional setup to achieve required objective. Specifically, the following are basic rationales why we need this guideline for SLMPs' supported nurseries.

³ Ministry Of Agriculture and Natural Resources, RURAL JOB OPPORTUNITY CREATION STRATEGY MAY 24, 2017

- Provide clear guidance on the effective transfer of the nurseries which are owned and supported by the projects to the community/ community member/local entrepreneurs before projects completion period. This will reduce further cost of public investment to the sub-component.
- Create additional measurable alternative income sources for SLMP target watersheds beneficiaries while ensuring sustainable supply of planting material for different actors who engaged/will engage in watershed development and greening. Enhance economic response of the watersheds to the community and create job opportunities for jobless youth of the watershed.
- Ensure knowledge, skill and technology transfer to community. Central nurseries are well organized in terms of establishment and inputs including nursery equipment under government ownership and/or project support. Therefore, will be used as centre of training and source of new species site(adaptation and multiplication site) which has a big impact on surrounding communities to share experiences and knowledge about species selection, importance and propagation techniques.
- Serve as model/show case site for community level business model to replicate the experiences at scale. This will establish strategy/policy implications for nursery management at national and regional levels.
- Transferring those nurseries to the community/community groups as alternative income source and linking with government, NGO's and private sector engaged in urban and rural greening programs and initiatives will ensure sustainability of nursery services. This will be one show case for active public-private partnership model in SLMP watersheds.

5. Scope of the Guideline

Initial use of this guideline (piloting) will be limited to selected central nurseries established and owned by SLMP in six Regions namely Amhara, Benishangule Gumuz, Gambella, Oromia SNNP and Tigray Regional States where nurseries are strengthened through program investment (financing) and management to fulfil demand for biological SWC interventions and promotion of important species of trees, fruit, forage and grasses species. After testing in selected pilot

nurseries, the guideline will be applied in all feasible SLMP central nurseries in all program watersheds and could be scaled up to non-SLMP site nurseries after updating.

6. Challenges and Opportunities of Nurseries handing over

As it is a new experience in SLMP watersheds, nursery handing over plan will not be an easy task. Financing, institutional setup, targeting of beneficiaries, by-laws and sustainability factors are major issues that need due consideration to have effective handover. All program watersheds do not have similar challenges and opportunities due to difference in social and economic setups even though similar treatments were applied through projects investment and support. However, brief SWOT analysis was conducted in sample nurseries and used as a reference (but not limited as it can be modified as per situation of community's experience) to map potentials and challenges summarized as follows. This brief analysis can be used as reference for contextual adoption of the model.

6.1. Strength

SLMP has invested well in most of central nurseries throughout the program period. Most of the investments have made on capacity building for nursery workers; nursery labours supervisors and Woreda experts, introduction of new species with multiple purposes, operational inputs supply and nursery equipment's purchase. Furthermore, the nurseries have available planting materials that can be used for further multiplication or propagation based on demand either for local consumption or potential markets. Central nurseries are organized on the assumption that coincides with biological conservation purpose for watersheds under SLMP management as well as for the Woredas. Therefore, transferred nurseries yet used to produce more planting material to fulfil biological conservation that enable the community to have potential market. Introduction of Species of trees, forage and grass that are multi-purpose and suitable for watershed development so that availing those species to community and establishing linkages for adoption is one of the good experiences identified. Specifically:-

- Central nurseries fulfils most of requirements for standard nursery sites including proximity to plantation site, available access roads, permanent water supply, enough size to accommodate more species depending on local requirements

- Most of central nurseries are covered with permanent trees and shrubs that can be used as fence as well as serve as hedgerow to protect seedling from excessive heating, wind, and frost.
- Central nurseries have long history on seedling production with legally accepted boundary with less ownership related dispute,
- They have accumulated various tree/shrubs/grass species including propagation technologies that can be adopted by the community/user groups
- As they are managed under the program, most of them are furnished with required type and quantity of nursery equipment's that ease to start seedling production,
- Nurseries are managed by trained and experienced manpower. Skills and experience should be transferred to other community groups in line with the benefits planned to be implemented to the community to sustainably manage the site.
- There are technical manuals and guidelines developed by various programs including SLMP that include on nursery management, propagation techniques, germination techniques for various species, and so on used by user groups
- The nurseries have access to technical information and resources produced by research institutions and different donors. Hence, they have better capacity to offer technical training for the target community, interested institutes and individual nursery development. Therefore, central nurseries serve as important training sites for individual farmers. Exposure of farmers to central Woreda nurseries helps to develop capabilities and the confidence to improve and conserve their landholdings through small-scale tree nursing.
- In addition to their function of multiplying planting materials nurseries in SLMP, is also provide income generating opportunities for the operators and enhance the social capital, technical capacity and leadership skills of communities.
- Guidelines and assessments are available for nursery management and planting material production and Income Generating Activity Implementation Manual which is prepared by SLMP which helps to guide experts and other implementers during planning and for appropriate decision making on management and planting material production.

6.2. Weakness

- As it has been mentioned earlier, central nurseries used most of program resources but they are not yet functioning with their full potential due to various reasons.
- Central nurseries have recommendable space for producing millions of seedlings that can cover optimal demand of the watersheds in each year. In the other hand, due to lack of commitment and poor planning much of their space is not ready for seedling production each year. Assessment made in selected SLMP nurseries showed that maximum and minimum sizes of central nurseries are in a range 5 to 1 ha. Potential capacity of the nursery vs. current production is compared and there is a significant gap on current production and potentials of nurseries to produce the maximum number of seedlings per production year.
- Most of the nurseries production space is occupied by forage and grass multiplication which those species of grasses are already adopted and produced by the community. In the contrary, those forage seedlings can be grown by direct sowing without investing much cost and wasting nursery space or can be managed by private and community owned nurseries to contribute to income generating options for smallholders. Therefore, the project nurseries should focus on quality tree seedling production which needs much care and investment.
- Nursery facilities; store, office and fence is not organized purposefully. They are constructed purposefully to safely store equipment's and inputs, office furniture and nursery record books for proper documentation of the information, to be referred by someone seeking the nurseries information in addition to internal use (follow up and monitoring).
- Actual investment vs. production capacity per year is not properly documented; therefore, it's difficult to know actual cost of nursery management and seedling production in each year. Due to improper planning, inputs can be supplied beyond the demand needed to the production year. E.g.: Sand, Forest/Soil... If it is stored properly, these inputs cannot be used for the next production season.

6.3. Opportunities

The SLMP adopted central nurseries; most of them were established during Derg regime (1968-1983E.C) for large scale commercial plantation establishment. Sites are ideal for seedling production and accessible to potential plantation sites in the Woredas. Most of them have annual water supply, established fence and wind breaks with enough production space. These nurseries has an average size of 2 ha including working areas and stores; with proper management, it is possible to produce an average of 700,000 different tree/shrubs species seedlings, 700,000 splits of grasses and 500,000 cuttings can be produced in a year. Therefore; a well-established nursery with average production potential of 1 million per year could much contribute to avoid establishment and running cost to produce require quantity and type of planting materials.

- There is accumulated experience, equipment's, technology and inputs that can be easy for the community/entrepreneurs to run nurseries without additional capital cost.
- Infrastructures including fences, stores, water sources, internal roads are well established that reduce additional costs of establishment and time.
- There are skilled and experienced man power that can be part of the community for smooth handover and continuing seedling production.
- Most of central nurseries are well established and have no any dispute with regard to ownership and boulder delineation. Some of them were mapped with accredited map by respective administration.
- Transfer also helps sustainability of central nursery while programs/ projects or government funding terminated by various reasons.
- Central nurseries are larger in size as compared to normal nursery which helps user groups to produce large amount and type of seedlings as per market demand. Furthermore, it can accommodate large number of employee to reduce number of jobless in respective areas.
- There are already established source of planting materials that can be multiplied by propagation including cutting, splitting and other vegetative propagation means, especially for grass, fruit and bamboo species.
- Making use of capacitated manpower and initial financial and material support to strengthen the available resource is opportunities need to be tapped by the community.

- Infrastructures like road and location of the sites are already known by the community so that no need of extra time and promotion (informal/formal) for marketing.
- Demand of planting material is at increasing rate due to national initiation of greening campaign and donor and government financed climate projects. There are plenty of government projects and NGO's working on rehabilitation, re-greening and landscaping in watershed and urban green development which can be potential market for private seedling producers.
- Furthermore, there are private sectors engaged in forage development and fattening, linking them with those seedling producers on forage seedling production and development is advantageous.
- In some areas, there are accesses to local seed collection which can specialise nurseries in some specific species based on the agro-ecology and make them known too county wide. For example: Bamboo at Benishangule, Indigenous species seedling production Amhara, Apple and Coffee seedling production at SNNPR and many more.
- It can create job for many jobless community members. It's a good business idea for groups; can absorb many members especially for rural female/women.

6.4. Treats

- Sustainability and transfer of central nurseries to the community is perceived as impossible without establishing active market.
- There are well experienced and capacitated nursery workers both on regular basis and those contracted during pick seasons of nursery activities. However, they may lose their job or the community may lose their expertise. Otherwise, there must be short term exit strategy until the community able to stand by them though funding will be a big challenge.
- From experience, user groups demand an immediate benefit than working for lone term impact, therefore, if they are not waiting patiently nurseries functioning may be interrupted or may stop to produce seedlings
- There must be strong institutional and legal (by-laws) base that every member of the community/user groups should obey and be responsible. Otherwise, due to few members, the whole group may be interrupted to continue or unable to achieve their objective

- Budget shortage to run community nurseries, if no enough market
- Organizational and responsibilities may not be strict unless it is supported and enforced by the worda administration and justice office or bylaws developed by the community themselves.
- Conflict of interest due to lower capacity to engage all community as user group members as the number of central nurseries are limited in each Woreda

7. Experiences on Handing over of Nurseries to Community

The seedling production process in central nurseries is not market-driven and is not commercially-oriented, though sometimes a nominal fee is charged to ensure seedlings are valued by the community. Central nurseries operations depend on donor (development partners) funded projects (e.g., SLMP) usually supports government nurseries by allocation of budget for purchasing of seeds, equipment's and other facilities. In actual cases, no experience is developed in handing over central nurseries to the community legally. Exceptional cases can be found in some Woredas (e.g. Oromia region) where central nurseries are still owned by the government but contractual agreement is made with community groups to produce seedlings as per the demand (quality, quantity and species) of the project annual plan so the project purchases seedlings. If there is production beyond the demand of the project, the group could sell to the community or other stakeholders based on current market price. In this case the groups organized to handle the arrangement is primarily earlier works/daily labourers in the nursery for many years. In a group about 10- 15 individuals can be participated permanently but can be many more contracted depending on pick time of activities it could absorb additional manpower that may create additional job opportunities for jobseekers.

This shows a very good experience on how nursery business is beneficial and can highly support income for the community but highly dependent on availability of potential market. Producers need to be ensured availability of the market and with demand (need to have pre-contractual agreement) before proceeding to production. This is mainly due to two reasons:

- **Uncertainty of the market/ Gap on demand establishment in the community:** Only government organizations or NGO'S working on environment restoration are potential customers of demanding planting materials. Demand from the community can be shown

for new species of planting materials or species that have high demand in the community and not accessible in other nurseries. Most of SLMP nurseries are located in a bit far from towns or cities where they could be potential market opportunities. Therefore it is totally/ highly dependent on availability of government projects/NGO's working on re-greening/environment in the Woreda.

- **Management Cost:** If there is no market during the year of production, management cost become higher and higher as seedlings are waiting in the nursery. Also some species of seedlings may not have market if the planting season is lapsed away at the time of production. This may bring a big loss in a year if one production season is failed away.

There has been an experience related with demand, supply and market linkages of community/self-help group and private level nurseries in SLMP. It's clear that Community/ Self-help group nurseries in SLMP is established & owned by community groups or highly supported by the project as a replica of central nurseries satisfying demand of the project that could supplement capacity of central nurseries where planting sites are very far from central nurseries. The principal purpose is to achieve multiple benefits of stakeholders; while the project demands seedlings near to the planting site, at the same time creating alternative jobs to the community. In support of the project the community is able to establish nurseries to produce and sell them in addition, providing new skills and inputs to plant their own lands. This is also highly dependent on three factors:

- **Proximity of the site to available market:** proximity of nursery site to towns or cities where urban plantation and demand of ornamental trees are available,
- **Government organizations or NGO'S working on environment restoration:** those in need of seedlings for the purpose are one of main market channels. Un availability of those projects or NGO's can highly affect income that could be expected in the production season,
- **Availability of inputs and tools:** some inputs; like bamboo seeds that cannot found easily but may have high market demand. Also sometimes water lifting or accessing water for the nurseries needs much investment (generator) that cannot be affordable by the group.

Box-1: *As a live experience; a community nursery in one of SLMP Woredas in Oromia region where the groups are established and working area of about 0.6ha is provided from Woreda office of Small and Medium Enterprise's with actual production area of 0.3ha. In support of inputs and nursery equipment's from SLMP-II and initial capital of 1500.00 ETB, as starting capital the group can manage to prepare 18 seedling beds with (1*12) m² using different sized and all in pots. Using 8cm pot size for direct sowing and transplanted to 14cm pots; especially for seedlings waiting relatively longer periods in the nursery. Also the price depends on the specie type, longevity of waiting in the nursery (size and health of the seedlings...). The bigger the seedlings, the bigger pot needed, the longer period taken in the nursery, the higher the price will be. This implies, the higher the management cost needed the bigger the price will be in addition to the species type demanded in the market. In this case, SLMP is the main market and some indigenous species are sold to churches. City administrations and Brokers can be referred as secondary market channels. Finally, the nursery can earn up to 84,000-100,000 ETB/year still 20-30 % remain in the nursery by grading. Changes in the livelihood is registered as two of the beneficiaries has sustained in nursery business and managed to buy "Bajajs", become land holders and already started additional business.*

In other scenario, there was also such initiative in Tigray region by the regional government some 5 years ago to hand over government owned nurseries to organized youth groups. However; achievement was mixed (some success but many failed to achieve the intended objective as many of the groups shifted the nurseries to vegetable production and even ploughed the production plots for cereal production). In the meantime the regional government refrains from distributing the nurseries to the groups as monitoring was very difficult. Of course, the weak point was, the transfer was not made based on detailed business analysis, follow and guidance to the groups. Such scenarios are experienced in all regions during program implementation. Therefore; it can be concluded that nursery business is a good job opportunity for rural job creation if it's owned in a real commitment and market linkage is created. Linking efforts to establish ownership of community managed nurseries with national re-greening projects and strategies is a considerable job creation option for sustainable income generation for the livelihood as well as source of quality seedlings supplier rather than investing in a separate mode.

8. Handing-over modalities

Handing over is not a kind of blanket method, as it needs contextual understanding of each situation depending on various factors that determine its success. Therefore, it is important to follow the procedures/modalities as guiding rule to take the right decision prior handing over for successful impact that it can create within the community.

8.1. Assessing the need for handing over

Central nurseries are highly dependent on project resources. Unless there is some source of finance from government or projects those nurseries are unable to produce seedlings. This experience is real in SLMP-I nurseries by the time the project has been completed its second phase support; most nurseries become non-functional against expectation. However, there will be further restoration interventions in the watersheds after the project completion. Some of the interventions that need continuous demand of seedlings are: Reforestation/ afforestation of project untreated degraded lands and strengthening project treated biological conservation structures.

Nurseries are the only place where quality seedlings can be produced. The need to establish a strategy to sustain those nurseries is mandatory; especially for sustaining supply of seedlings for watershed development activities. Besides having continued source of planting material, it is also mandatory to create job opportunities for rural job seekers before third phase project completion. Therefore, there must be thorough assessment (at woreda and community levels) of the need to transfer central nurseries, beside potential ground that enable to ease handing over process. These are some of guiding principle that we should follow or incorporate in our assessment of the need to transfer.

- Enabling environment to transfer including ownership, legal and free from any kind of disputes,
- Potential experience of community based nurseries,
- Availability of potential market for seedlings produced by the government,
- Potential finance/budget sources to run the nurseries,
- Interest of community to engage in nursery activity,

- If there is a need to follow legal Community Based Organization (CBO) set-ups like: Association, User groups, Private Limited Company (PLC) or others,
- Availability, commitment and identification potential user groups,
- Technical and political commitment of the local government at all levels and continuous provision and monitoring.
- All safeguards requirements of the sub-project (social and environmental) should be considered during assessment

As a general principle, handing over of central nurseries should create job, provide continuous supply of planting materials for watershed development activities by the government, nurseries should be function with their potential, serve as model to share experience to private and institutional owned nurseries, provide tree/shrubs/grass splits that are not easy accessible for small nurseries and to serve as center for training and technology transfer.

Box 2: Based on the general guiding principles and context specific factors, the woreda technique committee should conduct the assessment and submit the report for the woreda steering committee approval and endorsement. The woreda focal person will facilitate the process so that the next season (202/21 budget year) seedling production and nursery management will be implemented using the model, where possible. Assessment report with woreda steering committee decision will be submitted to Regional PCU for prioritization of the handing over plan.

8.2. Prioritizing nurseries: phase by phase handing over

Transfer of central nurseries to community groups should be done phase by phase to have lessons that other should share and avoid similar mistakes. Furthermore, project activities also need continuous supply of planting materials for on-going watershed development activities. Therefore, nurseries should be prioritized in consideration of multiple factors that should be handled well except pilot nursery list and criteria under Annex-1 of the guideline. Sometimes, handover may take time to be effective within anticipated period such as developing legal framework, targeting of community groups/user groups, finding potential market for seedling that are going to be produced, to settle issue related with nursery workers paid by the program or government but with all process the on-going project need required quantity and quality of

seedling for its annual planting and biological conservation activities. Thus, program activity exit and handover should go hand to hand just to not to leave any gap. Some of the factors considered on prioritization of central nurseries under the program for phase based transfer:-

- Annual requirement of planting material for watershed development activities,
- Availability of potential market or demand of seedling by the government as well as other development programs,
- Season of production, no need to transfer nurseries at pick production season as well as production area should be free for user groups,
- From experience and based the agreement it be better to classify some part of production area within the nursery to produce commercial seedling production and allot some area for production of vegetables for their daily home consumption,
- Demand of the community to develop plantation forests/ woodlots and demand of quality seedlings needs to produce in much care,
- Availability of projects/programs (Government, NGO's) working on landscape development that can be potential market or provide financial, capacity building training and provide technologies for community/user groups,
- Proximity for potential market (towns and cities nearby), based on year round transportation access and annual roads,
- size of the nursery and production potential,
- Management and production Trends of central nurseries

Prioritizing nurseries is also ensuring to manage the day-to-day activities of nursery owners, the typical target market, start-up costs, and legal considerations.

Box-3: Regional PCU will conduct the prioritization of the nurseries based on the experiences to be generated from the pilot nursery and assessment report of each woreda. The regional PCU watershed development and social development and livelihood specialists will closely work with concerned Department in the Bureau of Agriculture for technical support and plan achievements.

8.3. Legal frameworks to transfer nurseries

There is ample experience from SLMP in which self-help group nurseries are successfully producing and delivering quality seedlings to watershed development. It only requires good training, provision of essential equipment and supervision of the production system. This arrangement has benefits of enabling the Woredas to adequately provide planting materials. Besides, farmers will develop skills and knowledge about managing seedlings and generate income. Establishing legal transfer of selected central nurseries to groups who are selected to be engaged to the business is the first and main duty of this guideline. It can be linked with private sectors who are engaged in related business-like forage production, livestock development and fattening, fruit production and woodlot establishment; those nurseries can be a potential supplier to such companies.

Disclosure of the plan and discussion shall be made with Woreda office's which has mandated to legalize (Woreda office of Agriculture, Land Administration and use, SME,...). However, transfer needs serious legal issues as the public resource will be managed/ belonged and used by few member of the community. Furthermore, central nurseries are developed through huge public resource whoever is the source of the fund, it is crucial to assure the continuity of these nurseries' or shall be advanced to provide the required service to the whole community as well as fulfil demands by the government. Thus, transfer should be done/follow standardized formalities for any kind of accountability:-

- The community or user groups should be recognized as legal entity by certifying them as user group,
- There must be a contractual agreement by the community/user groups and local administration,
- Establish bylaws that should be recognized by the woreda justice office, accepted by local administration and members also responsible to obey for the rules and regulation.

Box-4: The steering committee chair (the woreda administrator) will establish committee drawn from mandated offices and responsible for legalization process. The woreda focal person will facilitate the process with necessary logistic arrangement for ontime delivery of the task. Finally, woreda steering committee (chaired by the administrator) will endorse the legal document of the group to start handing over of the nursery to the user group.

8.4. Handing over the Central Nurseries to Community

8.4.1. Assessment of potential Markets

Depending on regions context, agro-ecology, experience of tree planting and demand of species are main elements to identify potential target market for the business. As a potential market, Municipalities, private companies and landscapers could purchase large amounts of trees and plants on annual basis where the nursery is near to cities and towns. If the nursery is situated in watersheds where there are development projects, NGO's and re-greening programs by the government; identify their objective and need to adjust seedling production plan based on their demand is one of the main component to have sustainable market creation. A profitable nursery makes its money by selling large quantities of familiar and easy-to-grow plants. Perennials, common trees such as *Gravilia*, *Cupressess*, *Cordia*, *Junipers* and other tree species for landscaping hedges, fruit trees and coffee require little attention to grow/produce. This means that they will not take many of the resources to care for, but are more likely to be purchased by customers. Having enough product and satisfactory customer service will encourage your clients to return. In this context, the growth potential of the business depends on through availability of market and business management ability of group members; aggressive networking and the building of a large customer base especially with commercial clients. Based on increasing demand, nursery can continue to expand its operation as long as there is additional area is available.

Box-5: *At this stage, in line with market assessment, the woreda will prepare the detail business plan for the group based on technical standards of part two of the guideline. The woreda techniques committee (or specific task force assigned by the office of Agriculture) will be responsible for business plan preparation with woreda focal person facilitation. Based on the market potentials and feasible business plan, seasonal production plan of the nursery will be prepared by the technique committee (at least one season based on the proposed contract period with the group).*

8.4.2. Production plan of the central nurseries

A plant nursery grows plants from seeds or saplings to the size that most gardeners, landscapers, or larger retail distributors desire for rehabilitation of degraded areas, establishment of commercial woodlots, greening of backyard gardens, agroforestry and other purposes. A successful nursery offers a wide variety of young plants to their customers who purchase the seedlings/splits of grasses individually or in bulk quantities. The quality, selection and size of the products produced in the nursery will be dictated by the demographics of their location. Often, a nursery's selection is also influenced by business relationships the owner has established with major landscaping businesses. Some nurseries will specialize in trees, or grass or ornamental trees associated with decoration purpose. Central nurseries are project nurseries which are carefully selected, well-managed and organized (equipment and daily workers) sites to produce demand of planting materials for Woredas. Unless additional temporary workers can be added depending on the season and workload, a range of 6 to 20 daily workers are available throughout a year. In SLMP as a rule, there is one central nursery in each Woreda engaged to produce planting materials which can support biological rehabilitation/conservation targets. Sometimes, there may be more than one central nurseries in a Woreda depend on the proximity of planting site.

In support of two phases of SLMP a total of 182 central nurseries are under management. Based on the assessment made so far maximum and minimum size of the nursery was found in a range 5ha to 0.2 ha. Potential capacity of the nursery vs current production is compared; significant gap is identified in different areas. Among the 16 nurseries visited in three regions seedling production blocks are designed as Tree, fruit, Bamboo, Forage and Grass. Share of each block is

identified, tree seedling production area is the list share used from nursery production spaces; about 8-10% of the total area, forage seedling production 15 %, for grass multiplication about 60% and rest is for preparation area and other purposes. Based on the observation made, working condition & trends in SLMP, a 1ha nursery with its potential can produce an average of 2,550,000 planting materials (400,000 tree seedlings including fruit, 150,000 forage seedlings and 2,000,000 grass clumps) per year.

Box-6: Balancing the need for watersheds restoration seedling requirement by woreda office of Agriculture and market return of seedlings for the group, production plan and seedling proportion will be prepared by woreda technique committee or any delegated technical group by the woreda. Regional and National PCU technical expert will support the process.

Creating competence in supplying quality and diversified seedlings highly needs knowledge of how to grow and cultivate plants but it can be extremely rewarding if lead by knowledge and skill of record keeping, business making/entrepreneurship. In support of Woreda experts and other stakeholders, those nurseries transferred to community groups have effective competence b/c: Central nurseries had regular and easy access to new and appropriate technologies. This can be an opportunity of producing a mixture of new, adopted and indigenous seedlings that could diversify its supply to the customer. The more diversified the species type, the wider the opportunity to provide choices for the customer, the more diversified technologies used for planting material production, more options to create to the customer to select the appropriate.

Appropriate documentation of the species produced with its investment cost is also very important. Record keeping of the resources invested per production year based on the input type and quantity and labour costs to produced marketable products (species, number of seedlings per species, inputs, materials and quality, period of production and longevity of the plants in the nursery also should be recorded to know the current transaction and future plan of seedlings produced in the nursery.

8.4.3. Targeting members and Establishing the Group

Who is this business right for? Usually group/community nurseries are need and trust based establishments whose processing and procedural performance would be performed with the

intensive support of concerned and/or respective professionals. Group size is usually 10 to 25 individuals. But, it is to be determined on the basis of the holding capacity of the land allotted for nursery. Careful selection of those members is essential to minimize conflicts in the community risk of business sustainability. Seedling production is referred as one of group base activities in Income Generating Activity (IGA) Manual developed by SLMP-II in 2009 E.C. Defined selection criteria's are set in the manual for such a business. Before selection the following Principles of grouping should be applied:

- Have a real interest in the business (best suited for someone who enjoys cultivation of seedlings and an appreciation for the agricultural life),
- Have in the same social and economic status in the community,
- Democratic decision making,
- Members Participation on benefit sharing,
- Trust between members and towards common benefits,
- Create linkage with other groups engaged in same scenario.
- At least 50% women participation.

Considering the above principles of grouping, the following major Criteria for group members' selection could be applied with additions based on local context.

- Possibly, landless or jobless rural youths (Male and Female), referring the RLLP Project Appraisal Documents, consideration of 50% share of female members shall be maintained.
- However, considering the psychological expectation of the business return in the short run, community members with other livelihood options could be targeted to establish feasible business at the beginning.
- Farmers (Male and Female) with very small land holdings (< 0.25ha) as a basis for rural livelihood, poorest even for subsistence living
- Experience in nursery operation and seedling production; preferably, one who is/was a nursery worker
- Have a real interest in the business (best suited for someone who enjoys cultivation of seedlings and an appreciation for the agricultural life)
- Have the capacity to absorb technical trainings and ability to implement on practice,
- Ability to create their own capital to the deadline and return and run their business,

- Willing to fetch the opportunity and change their livelihood,
- Based on the time table, ability to contribute 70% of the starting capital,
- Members who cannot afford to contribute 70% of the initial cost but have the motivation and commitment to engage in the business is approved by community watershed team, have the privilege to be participated in the group and will pay back,

Box-7: Based on the eligible category of business, user groups can be organized and registered as legal entity Private limited companies or associations or as SME's. The woreda concerned office will decide and grant certificate accordingly. Each group members will have membership certificate on contractual basis. All legal requirements for the business including group bylaw will be managed at this level.

In SLMP a good nursery operation mainly depends on nursery workers that are experienced, careful and responsible. Most of the daily workers have much knowledge about nursery management and operations, their experience also made them a researcher; even much better than what is known theoretically by technical expert. During the process of seedling production and management, those workers with experiences know a simplified and easy way of soil mix, bed arrangement and compartment structure, seed treatments with null or minimum damage of some of the species types which are difficult, germination stage and health status of seedlings, type of multiplication and in general when to operate which activities (watering, shading root pruning,...) help to produce healthy and effective seedlings which has direct implication to cost of investment per demand. This is due to practical trainings provided and experiences gathered during process of the activities.

Those staffs are able to manage produce quality seedlings based on the market demand. This helps much to save time and money to create awareness as compared to new technologies and new manpower engaged in the business at first stage. Community groups which are new to nursery operation need more time and effort for training and practices to engage them directly to market based production of quality seedlings. In this case, the one which has all the technical and practical qualities in nursery management and production of quality seedlings needs only to switch them to business scenarios of nursery management.

In the first stage of transferring central nurseries to community groups, maintaining those staffs for the first round means making central nurseries effective business areas with a short time and switching them to the required objective in a short period. Within the agreed rotation period of owning nurseries, the next group could have a chance to be trained effectively both the technical and business skills of nursery operations that it become effective. Therefore this strategically approach can be a good one to bring successful experiences, pilot them to a new approach for sustainability of the business.

8.4.4. Provide training for group members

The project will support training of the legal group members on business plan development, business management and accounting, and other require training for business success including entrepreneurship skill. Training should be provided to group members focusing on technical skills required of nursery operation as well as basic business and management skills. There is experience in SLMP in which community/self-help group nurseries are successfully producing and delivering quality seedlings to a project. It only requires good training, provision of essential equipment and supervision of the production system. This arrangement has benefits of enabling the Woredas to adequately provide planting materials. Besides, farmers will develop skills and knowledge about managing seedlings and generate income. Farmer -to farmer training and exchange visit is a powerful tool to create awareness, enhance capacity and initiate for the business.

8.4.5. Business plan development for user groups

A clear plan (based on the details of PART-II of the guideline) is essential for success as entrepreneurs. It will help to map out the specifics of the business and discover some unknowns. A few important topics to consider during business plan preparation are:

- ***What are the initial costs?*** In this case, even if nurseries are initially equipped and under engagement, to know initial cost/ starting capital during transferring the assets to the community will be mandatory
- ***Who is the target market?*** This is the main determining factor for sustainability of such business. Critical identification of the target market and knowing (to the level of pre-contracting during implementation) the first task to decide as business,

- ***How long it will take to break even?*** It's highly related to the availability of the market and active engagement and commitment of the group members,(cost benefit analysis based on the business plan)and other external factors
- ***How long it will take to a group to establish their own capital/step out to a new business?*** Depending on its profitability of the business, life span of one group will be 5-7 years.
- ***What will you name the business?*** There are options to name nurseries. Specialization by species of seedling produced can be used to name it like Coffee Nursery, Bamboo nurseries Forage Nursery, Fruit and shade tree nurseries it can be known and promoted, or can provide any name; simple and short, agreed by the group. It's also important for registration as a legal community business

8.4.6. Legal Transfer and Set up Business Accounting/Auditing system

Formal transfer of the nursery Selected Community Groups /Developing Memorandum of Understanding (MoU) including Open a Bank/ Micro finance Saving Account. Using dedicated business banking and credit accounts is essential for the group. Personal and business accounts should not be mixed to know and manage the business. Recording various expenses and sources of income is critical to understand the financial performance of the business. Keeping accurate and detailed accounts also greatly simplifies your annual performance and next year plan, profitability of the business as well as profit sharing. The sample Contractual agreement/MoU format is drafted and annexe. This is based on the experiences of contracting in self-help groups in the woredas or can be included in the by-laws of the group as necessary. The following essential elements are including in the agreement:

- The agreement is renewed per every planting season,
- The agreement has legal binding articles that would enable to plant standardized seedlings in time,
- Woreda-level professionals are obliged to give intensive support to producers for quality production,
- At start-up 20% of the total amount, upon finishing 50% of the work 30%, and finally, upon completion and delivery of the product the remaining 50% would be paid.

8.4.7. Mapping stakeholders roles and responsibilities

As project implementation arrangement and nature of the assignment needs participation of multi-sectors in the existing government structures especially at Woreda and kebele level. At Woreda level; Office of agriculture, Woreda focal point of Sustainable Land Management Program and platforms like Woreda steering and technic committee , Office of SME, office of women and children affairs, office of land administration, office of finance and economic development and cooperatives agency are the main actors and contributors to support the groups to organize based on policy and legalization frame works, technical and financial support is also expected from those offices to integrate and work together to stabilize and sustain the group. At kebele level, administration of kebeles, agriculture office, kebele watershed team, community watershed team and watershed users associations has also a big role in mobilizing the community during participant's selection, legal transfer of nurseries, awareness creation on nurseries and livelihood development, supervision and monitoring of the group based on objective their establishment.

At the time of establishment/ transfer of the nurseries, the Woreda office of agriculture in collaboration with SLM coordination and platforms (WTC, KWT), should facilitate and develop mechanism in supporting on the provision of different inputs (species of seed of trees, forage and grasses, polythen tubes, sand, soil ...) materials and equipment's, based on production potential of the nursery and market demand. Besides, the following material support should be maintained/ provided by the Woreda office of agriculture to user groups engaged in multiplication of planting materials as initial support (in kind) for nurseries nominated to transfer to community groups: wheel barrow, watering can, spade, rake, root pruning scissors, seedling tray, pickaxe, and sand sieve, Polythene tube, watering canes, bucket and rakes and others.

Regional and Zonal experts and Woreda TC members are expected to assist organized groups to develop bylaw and get registered as Small and Medium scale enterprise. Although small and medium enterprises are not promoted in SLMP, the establishment of group nurseries is suitable for this type of organization. Small enterprises have a capital of 50,000 – 500,000 ETB and between 6 to 30 workers. In SLMP linking such groups with Cooperatives was promoted for long time with no/ insignificant impact on their values and support in any one of the business done in SLMP because of:

- Need to work with groups who has land holdings and other assets,
- long processing of the legalization,
- Weak follow-up and professional backstopping due to excessive workload,
- Very limited practice-oriented training and focusing on theory,
- Cumbersome and tedious bye-law document and use of so many ledgers at a time in which the documentation is also poor. In contrary, medium and small enterprises Promotion Agency more preferred due to:
 - Fast processing of the legalization and immediate certification,
 - Relatively better follow-up,
 - More of practice-oriented than focusing on theories,
 - Use of customized, short and easily understandable bye-law formulation,
 - Focusing on a number of small groups that will be amalgamated in the future than aiming on one or two non-manageable groups.

Hence, the use of this mandated and more effective agency would seem more preferable. Efforts should be made to encourage user groups to produce planting materials for the market in large quantities. Woreda office of agriculture together with Woreda SME office should facilitate the process for marketing and contracting with customers to deal with user groups to supply planting materials. The contract fixes the types of planting material to be provided, time of delivery, delivery place and the guaranteed price for specified quality standards.

8.4.8. Monitoring and evaluation of the business

Regular technical support on production of seedlings and support them to keep records of any financial issues related with the investment is mandatory. Woreda SME office, Woreda bureau of agriculture, Woreda office of women and uses are responsible body to intensively support them until the group have developed the confidence in the business. Based on IGA implementation manual Woredas SLMP focal together with Woreda office of agriculture should establish support of pre-financing modalities for the group to start the business. The first group shall hand over all the fixed assets supported by the project to the second group

Part-II: Nursery Business Plan Development

1. Introduction

The basic and foremost reason for the business plan is to run the existing central nurseries as business entity to generate profit for the users as starting intervention in the production of different seedlings on the existing nurseries. Production of seedling could start immediately after the handing over ownership and business plan endorsement to the community. Among the existing functional nurseries six nurseries will be selected (one per region) based on selection criteria for first round as a pilot then the remaining central nurseries will be handed over and business plan adapted to the community phase by phase based on the lessons learnt from the first round.

1.1. Framework of business model options

There are at least two options of business models that can serve for seedling production business entity at the seedling nurseries. This business model could be Farmers Business School and business plan. The latter is selected for existing central nurseries established by the support of SLMP which is intended to be handover to local level communities with objectives of producing planting materials for land and watershed development and job-creation and livelihood development of the local communities

1.2. Need for the business plan

Over ten years of experiences, these government owned central nurseries supplied quite larger number of planting materials like tree seedlings, fruit seedlings, grasses and other planting materials to the communities for conservation purposes at watershed and individual homesteads for household consumption. The government owned flagship program SLMP, is the main financial sources whereas; majority of the technical support is from Woreda and zone agriculture offices. Even though, there are capacity variation in terms of areas and investment, these central nurseries consumed quite high budget as investment and overhead costs and engaged larger number of employees from surrounding communities as permanent and temporary workers. Therefore, from government side there is a need to hand over ownership to the local community as a means for job creation and profit motive with-out compromising the planting materials supply for limited watershed development and rehabilitation need from the government side. As part of handing over guideline, business plan model is proposed to be adapted by existing central nurseries that have different production capacity but at the economies of scale and options of production mix.

1.3. Purpose of the business plan

Options of business plan model will be prepared for existing central nurseries with options of production capacities of seedling production like tree, fruit and grass seedling production for watershed rehabilitation as well as for market. Therefore, the purpose of having the business plan for the central nurseries comprises the following in the context of existing central nurseries,

- To examine technical, economic and financial feasibility of the central nurseries for the employees and the community and
- To prepare a business plan document for requesting financial loan from lender such as banks, micro finance Institutions, saving and credit cooperation and unions to fulfil capital requirement to run the business and generate profit for future expansion and intensification.

2. Goals of the business plan

- Sustainable production and distribution of seedling to watershed rehabilitation program and homestead plantation
- Generate income for target groups for the livelihood improvement

3. Objectives of the business plan

- Serves as planning tool for management and operation,
- Evaluate performance in terms of expenses and income for seedling production at the community owned central nurseries.

4. Situation analysis of the nurseries

The central nurseries are established with the primary objective of supplying planting materials like tree seedling and grasses for watershed development and rehabilitation purposes and individual homestead plantation. Currently, the areas to be rehabilitated reduced so that the demand for planting materials limited and communities are started to produce various type of seedlings for self uses. However, there are remaining of planting materials requirement for the rehabilitation and watershed development activities. There are also need for fruit seedlings and forage by the communities and other organizations. The existing of these needs are the reasons for the continuation of seedling production at central nurseries but with different arrangement. These new arrangements include; transfer of the ownership from government to community, manage with business plan and profit motive and focus on production of fruits of different type based on the agro ecological set-up and needs of the regions. The existing more than 182 government owned central nurseries have different sizes of area ranging from 1 to 4 hectors allotted to produce planting materials like grasses, forages and tree seedlings. The nurseries are fenced, have building for stores and guarding different working equipment's and facilities which are supplied by the government and SLMP.

The nursery capacity assessment report for forest development strategy done in 2018 revealed that tree seedling production area about 8-10% of the total area, forage seedling production 15 %, for grass multiplication about 60% and rest is for preparation area and other purposes. The assessment result is also indicated that most of the nursery area (75%) is occupied by forage and grass multiplication and only 10% is for tree seedling production. The assessment also revealed that based on the observation made, working condition & trends in SLMP, a 1ha nursery with its potential can produce an average of 400,000 tree seedlings, 150,000 forage seedlings and 2,000,000 grass clumps per year. The same study recommends that, now day's grasses are also multiplied by farmers on individual farms as income generation and to cover their own demand. Therefore, the project nurseries should focus on quality tree seedling production which needs much care and income. Transferring nurseries to community is indicated as impossible without establishing active markets.

5. Production situations and mix of products

Considering the area, production potential of the nurseries, existing experiences, the introduction of the new initiative (management and profit motives) and potential future demand the central nurseries will give focus to fruits seedling production followed by tree seedlings and grasses. As it is indicated earlier, eventhough the capacities of the nurseries are higher than the proposed quantities of seedling production and seedling mix. As well as the expectation of uncertainty in market demand and limited management capacities, the business plan considers production grasses, tree seedling and fruit seedling to lower production limit. However, the allocation of the area for seedling production, mix of seedling products could be decided by the region and the community considering the experiences they have, agro-ecology variation, demand and interest of the market. This business plan is taken 100,000 seedling fruits, 100, 0000 tree seedlings and 100,000 which are 300,000 seedlings in total as first round production on one hector of land for course the remaining area of land could be used for production of different vegetables immediate uses and income for the community and preparation area seedling production. Region could be adapting this production assumption and business plan to develop their own business plan based on their production assumption, product mix and area of land depending on agro-ecology and market demand. In the first round of seedling production, focus will be given to those fruits like Avocado and Mango raised from seed as well as coffee seedlings. Likewise, tree seedlings could be also decided by the community to those friendly to the agro-ecology and demanded by the consumers. In the production process, attention will be given to quality seedling with higher yielding capacity and free of diseases.

5.1. Market and demand situations

The government and community initiative on rehabilitation and watershed development is primary demand for the tree seedlings and grasses in addition to individual demand for homestead plantation for personal uses. Since the nurseries are inexperienced in fruit seedlings

production, efforts are needed to look for market access and create demand for fruit seedlings. Government extension, non-governmental organization and dwellers in rural and urban areas are the potential market especially, for fruit seedlings. In this round focus will be given to the nearest located central nurseries to minimize the transportation cost of the seedling, for fast and easy seedling supply to consumer to their destination.

5.2. Pricing strategies

Cost of production, transaction cost and past experiences of price strategy are the determinants to set-up price for the seedling production. The price should be at least equal to the unit cost of production be the business at break-even point where there is no profit or loss. The transaction cost should be at minimal level or avoid any type of transaction cost incurred for different activities in process of selling and buying goods and services. Decision of selling pricing of seedling consider into account the past price trends for the seedling like grasses, trees and fruits supplied from central nurseries to local markets. For example the nursery capacity assessment report done for forest development strategy in 2018 revealed that in Ejerie Woreda of Oromia region price of *Olea Africana*, *Junipers procera*, *Pinus patula* and *Gravilia rubosta* was 35, 35, 10 and 15 Birr per seedling, respectively which was nearly 24 Birr per seedling on average at the local market. Likewise, even though, the experience of central nurseries in providing fruits to local markets is limited. Accordingly, for Grass seedlings 2 birr per seedling is taken while for tree and fruit seedling prepared with pots is 15 Birr and 20 Birr per Seedling are taken, respectively for interest of this business plan preparation.

6. Short and long-term seedling production trends of the nurseries

Considering the infant experiences of the community in managing seedling at central nurseries, the area and annual seedling production capacity will be increased over the coming years depending on the accumulated experiences of the community. Enterprise budgeting model will be applied for types of seedling and nursery land productivity set up. For first and second years of production, as short-term plan 300,000 seedling of different type has been taken but after evaluating experiences and profit gained as well as market demand in with in the two years, as long-term production plan, the area under seedling production and introduction of new seedling production mix will increase to higher level. Ultimately, the seedling production trends consecutively increase phase by phase depending on the size of the areas under seedling production.

7. Financial plan

Assumptions: The following assumptions are taken to develop financial plan for the business plan; these assumptions relate to land, labour and capital.

Land sources and availability: The amount of seedling production is entirely depending on the availability of land. There is no land fee associated with production costs since the land has no Mortgage attached. As indicated earlier paragraph of this paper, the areas under central seedling production is ranging from 1 to 4 hectors. However, 1 hector of land consider for the business plan preparation. This assumption will be adapted for available land under each circumstance.

Labour: The source of labour assumed from owner's labor and no additional labor will be billed. To avoid the low wage rate which was recorded the evacuation of experienced employed workers from the work, this business plan considered the opportunity cost of labor be 80 Birr for eight working hours per day.

Capital requirement: Three options of capital sources are considered. Grant, own and loan are sources of capital for the central nurseries. As per the working guideline developed for income generation activities and inputs administration and implementation, describes that out of the total capital requirement for any business plan generates form three sources; 30% of the total capital requirement is covered from project support for fixed costs considered in the business model while the remaining 70% is by the business owner. Out of 70%, 30% will be paid by participants and the remain 40% from collected from revolving funds as per the management guide of the revolving fund from rural financial office and organization. As per the budget requirement of this seedling production business plan; the project will provide 320595 Birr grant to nursery owner and 320595 Birr will be the investment by the owner while the remaining 427470 Birr will be covered from loan. The loan will be given on 10% interest rate and the payment period will depend on the nature of the agriculture production. In this case considered the loan payment period calculated for one and half year.

Expenses calculation: Cost estimation for seedling production business was considered secondary data from different sources. A separate budget estimation calculated for grass seedling, tree seedlings and fruit seedling production for one year on one hector of land. Whole seedling production budget is also derived from separate budget requirement.

Revenue: The source of revenue in seedling production business is the sale of the seedlings to the buyers. The amount of seedling delivered to the market assumed 10% loss of seedling in production, management and distribution. Therefore, 90% of seedling will be availed to the market.

Table 1 Budget requirement

Cost Items/ seedling	Unit	Unit cost	100000 Fruit seedlings		100000 Tree seedlings		100000 Grass seedlings		300000 seedlings/Fruit, Tree and Grass/	
			Fruit	Cost(Birr)	Tree	Cost(Birr)	Grass	Cost(Birr)	Total	Total cost(Birr)
Fence maintenance	MD	80.00	30	2,400.00	0	0.00	0	0.00	30	2,400.00
Preparation of mother bed and polypod beds	MD	80.00	76	6,080.00	61	4880.00	0	0.00	137	10,960.00
Potting mixture preparation and filling up of ploy pods	MD	80.00	500	40,000.00	225	18000.00	0	0.00	725	58,000.00
Seed sowing/ Split planting for grasses	MD	80.00	76	6,080.00	38	3040.00	529	42320.00	643	51,440.00
Preparation of shed	MD	80.00	76	6,080.00	41	3280.00	0	0.00	117	9,360.00
Picking out seedlings	MD	80.00	820	65,600.00	2	160.00	0	0.00	822	65,760.00
Weeding	MD	80.00	23	1,840.00	100	8000.00	106	8480.00	229	18,320.00
Watering	MD	80.00	137	10,960.00	90	7200.00	140	11200.00	367	29,360.00
Polybags	Kgs	200.00	250	50,000.00	250	50000.00	0	0.00	500	100,000.00
Loamy soil	M ³	50.00	1177.5	58,875.00	1177.5	58875.00	0	0.00	2355	117,750.00
Sand	M ³	50.00	294.4	14,720.00	294.4	14720.00	0	0.00	588.8	29,440.00
Compost	M ³	50.00	294.4	14,720.00	294.4	14720.00	294.4	14720.00	883.2	44,160.00
Seed	Kg	300.00	12	3,600.00	6	1800.00	0	0.00	18	5,400.00
Grass clamps	No	0.50	0	0.00	0	0.00	2222	1111.00	2222	1,111.00
Thinning and weeding	MD	80	360	28,800.00		0.00	360	28800.00	720	57,600.00
Transplanting	MD	80	50	4,000.00	50	4000.00	0	0.00	100	8,000.00
Protection from pest	MD	80	30	2,400.00	30	2400.00	30	2400.00	90	7,200.00
Plowing	MD	80	0	0.00	0	0.00	4	320.00	4	320
Cost of other materials	lamp sum	1.00	15000	15,000.00	15000.00	15000.00	5000	5000.00	35000	35,000.00
Total				331,155.00		206,075.00		114351.00		651581.00
Material for shed and fencing				417070.00		0.00		0.00		417070.00
Total budget				748225.00		206,075.00		114351.00		1068651.00
Unit cost				7.48	0.00	2.06	0.00	1.14	0.00	3.56
Gross income				900000		450000		180000.00		1530000.00

Table 2. Projected monthly cash flow

Projected cash flow in Months in ETB														
No.	Items	Total	June	July	August	September	October	November	December	January	February	March	April	May
1	Capital outlays/ Birr													
	Land rent	0												
	Total capital outlay Owners	320595												
	Total capital outlay loan	427460												
	Grant towards capital outlays	320595												
	Net capital outlay													
	Total capital outlay													
2	Annual operating cost													
	Casual labor	318720	26560	26560	26560	26560	26560	26560	26560	26560	26560	26560	26560	26560
	Polybags	100000	100000											
	Seed and grass clamps	6511	6511											
	Soil	191350		191350										
	Other materials	35000	35000											
	Martials for fencing	417070	417070											
	Total operating cost	1068651	585141	217910	26560	26560	26560	26560	26560	26560	26560	26560	26560	26560
3	Nursery revenue													
	Grass seedlings	180000	0	0	0				60000	60000	60000	0	0	0
	Tree seedlings	450000	0	0	0	75000	75000	75000	75000	75000	75000	0	0	0
	Fruit seedlings	900000	0	0	0	150000	150000	150000	150000	150000	150000	0	0	0
	Total revenue	1530000	0	0	0	225000	225000	225000	285000	285000	285000	0	0	0
	Monthly net cash flow		-585141	-217910	-26560	198440	198440	198440	258440	258440	258440	-26560	-26560	-26560
	Monthly balance		-585141	803051	-829611	-631171	-432731	-234291	24149	282589	541029	514469	487909	461349

Table 3. Business income statement

Description	Birr	Remark
Revenue	1,530,000	
Total revenue	1,530,000	
Operating cost	1,068,651	
Operating cost	1,068,651	
Total operating cost	1,068,651	
Profit before interest and tax	461,349	
Interest expenses term loan	42,746	
Profit before tax	418,603	
Income tax (30%)	125,581	
Net profit	293,022	
Profit margin	30%	Net income (Revenue-Total expense)/Revenue

*Seedling production central nursery; projected income statement, one year

7.1. Contribution merging

The contribution margin is calculated by subtracting an item's variable costs from the selling price then used to cover the fixed costs, and if there is any money left after that, it's your net profit. The contribution margin is calculated for grass, trees and fruit separately as well as for the aggregate.

Table 4 contribution merging

Seedling type	Amount of seedling	Unit variable cost /Birr	Selling price/Birr	Contribution margin
Grasses	100000	1.14	2.00	0.86
Trees	100000	2.06	15.00	13
Fruits	100000	7.48	20.00	12.53
Aggregate and average	300000	3.56	12.5	9.00

7.2. Rate of return (RoRT)

A rate of Return (ROR) is gain or loss of an investment over certain period of time. In other words, the rate of return is gain (or loss) compared to the cost of initial investment, typically expressed in the form of percentage. When the ROR is positive, it is considered a gain and when the ROR is negative, it reflects a loss on the investment.

$$\text{RoRT} = \frac{\text{TR} - \text{TC}}{\text{TC}} \times 100$$

Where, TR=Total Revenue

TC = Total cost

$$\text{Therefore, RoRT} = \frac{(1530000 - 1068651)}{1068651} \times 100$$

$$\text{RoRT} = 43\%$$

7.3. Net Present value

The Net present value (NPV) of the project discounted at 12% is, which is positive and making the investment very attractive and requiring very high discounting rate to be zero. The positive NPV which is greater than zero means that the business is attractive.

$$NPV = \text{Cash flow}/(1+i)^t - I$$

Where, i is discount rate at 12%

T is a time period

I is the initial investment

$$\text{Therefore, NPV} = (1530000/1.12) - 1068651 =$$

$$NPV = 297420$$

8. Institutional and policy support

Approval of the business plan by the KWT an Woreda TC: considering the flexible business model to be applied (in terms of enterprise selection), the KWT and WTC will review and approve the business model per year for sustainability of the business and to identify areas of support from the governing structures

Certification and legalization of land ownership: Along the way the legalization of the land ownership should be shifted to the community for government. The shift should be done based on the rural land administration and consensus between the local government and the community. Therefore, the certification should be handled in line with legalization process. To that effect the concerned organization in the government sector should be consulted and take actions. The kebele watershed committee in the short run and the Watershed user association in the long run will be the owner of the Nursery certificate to be issued.

Public-Private Partnership linkage: linkage should be established between public and private for the success of the intended investment on seedling production by the community. The Woreda office of agriculture and the department within should play leading role in mobilizing public and private partners and facilitate the linkage. The possible private sector inventory will be made by SLMP and establish Nursery VCD interventions

Financial and Credit Support modalities: Since the community is the beginner in the seedling production investment, lack business management skill in addition to technical and skill gap in

seedling production to reduce the backlogs of planned activities and failure should be accessed and favored in any aspect of support. Among other financial and credit support play vital role for the success of the business. Therefore, the project and financial institutions extend their support in the provision of finance and credit. SLMP will train the group on Business accounting and Management.

9. Possible risks and mitigation measures

Table 5. Possible risks and mitigation plan

Possible risks	Mitigation measures
Limited water access which may need additional investment	For the first nurseries focus to those having permanent natural water access
Demand is limited and proximity of nurseries to market	Map the possible demand location as well as focus to those nurseries found to the nearest market
Difficult to mobilize the users	Prior preparation through engaging the community to transport the seedlings or establish market center by the group
The community may lack technical skill and experiences in producing seedling especially fruits	Provide skill-based training on fruit production at back yard level (Backyard intensification techniques)

*A table shows possible risks that are expected in the business with possible mitigation measures.

Part-III: Annexes and References

1. Annexes

1.1. Criteria for pilot central nursery selection for handing over

Selection criteria are not limited (based on this guideline); rather it should be modified depending on respective situation of each central nursery though the modalities should be recognized very well and should be practical. The followings are the major selection criteria to be successful with piloting in six nurseries indicated in Table 6 below.

- Sufficient nursery area to accommodate more beneficiaries,
- Well-developed nursery management experiences by Woreda and kebele experts,
- GIZ technical cooperation intervention watersheds to tap the bellow opportunities:
 - Woreda and kebele extension service providers and farmers trained in Farmers Business School,
 - Woreda experts and SMEs trained entrepreneurship and business plan preparation and entrepreneurship motivation training,
 - Capacity to provide entrepreneurship skills training for SMEs, user groups, cooperative leaders,
 - Presences of youths and jobless groups who are interested to participate in SMEs organized after entrepreneurship training (wonsho Woreda),
- Availability of labor/landless youths/willingness of youth/women to be engaged on nursery business preferably those who have nursery work experiences,
- Potential targeting capacity that encompass jobless women and youth,
- availability of potential market outlet opportunities for raising seedlings,
- Suitability of the agro-ecology /Watershed with high ecological potential of diverse fruit and other planting material growing,
- Accessibility of the area /road accessibility /woreda to follow up and monitor timely performance

Table 6. Nurseries proposed for Nursery business and handing over piloting

Name of the Region	Name of the Woreda	Name of the major watershed	Name of the Micro-watershed	Specific name of the nursery	Size of the Nursery in Ha.
Amhara	Bure zuria	Yesir	Gzani	Fanda	1.5
Benishangul Gumuz	Bambasi	Sonka	Mender 45 (1)	Mender 45 (1)	0.5-1
Gambella	Goderie	Ziey	Gendekore/LowerGeji	Shaye wonze/Akash	1.2/0.85
Oromia	Wolemera	Wechecha	Kile Bobe	Suba	0.12
SNNPR	Wonsho	Orsha-Geo	Dea 1	Andegna Ferro	0.7
Tigray	Raya Azebo	Lower Burka Abageber	Waikel	Kombolcha	2.51

1.2. Sample framework for business group formation

Sample framework for nursery business group formation: (In reference to annex 8 of Guideline for Production and Management of Planting Materials for Watershed Development)

Name of Region _____	Date use right Legalized _____
Nmae of Woreda _____	Meeting day _____
Name of Watershed _____	Registration Fee _____
Name of Kebele _____	Monthly Saving _____
Name of the Nursery _____	Special Payment per annum _____
Group Name _____	Logo _____
Date Regulations Established _____	

Objective of the establishing nursery business

- Organize jobless women (50%) and youth (50%) surrounding the nursery site and enable them establish or strengthen income generating nursery activities;
- Make possible borrow inputs in kind and payback in the same way or cash;
- To enable nurseries produce adequate quality seedlings for market;
- This objective can only be reached when all members work together, create and be abided by regulations, ensure regular payment of membership fees and repay loans (one hundred percent) within the set time frame;
- To become a legalized institution with the right to accuse or be accused in the court of law;
- Empower jobless women and use access credit through micro-credit schemes;
- Support the jobless form capital and/or seed money upon graduation and get transformed to the next higher business for the new comers to get in nursery trade anew;

Membership establishment

- Jobless women and youth whose interest is to get organized
- Minimum age limit should be 18 years or above
- Residing within watershed surrounding the nursery site
- Active participant in community works
- Interested to revolve inputs for it to reach all farmers through time
- Willing to practice SWC physical and biological works including homestead development
- Number of the group members could be 20-25 measuring the holding capacity of the allotted land
- Other Requirements;

Members' Rights and Obligations

- Every member has equal rights. He has the right to speak and vote; the right to elect or be elected as a Management Committee member; the right to accuse or obligation to be accused.
- At the time of graduation and reaching self-supportive stage, self-help group and their respective members are obliged to transfer seed money they have been getting during the project years to newly established group.

- Every member has access to services rendered and benefits generated by the revolving fund in accordance with bylaws, internal rules and turns set by members;
- Every member has to obey rules and regulations and obliged to pay membership and other fees as stipulated in the bylaw governing the revolving fund;
- Group members should work hard in order to fulfil obligations stated in the binding agreement signed between their group and Office of Agriculture and can sell out the remaining ones to anybody demanding;
- Other rights and obligations.

Management Committee

- The management committee is a group of participants elected and supervised by the General Assembly from the members of the group.
- This group of members is in charge of the organisation and of the efficient management of the activities and resources of the group.
- Are elected on the basis of their competencies and qualities and not their social position
- In the event of poor performance, the General Assembly can change the members of the management committee.
- The General Assembly can call an emergency meeting to replace one or more members of the management committee if more than 2/3 of the members vote in favour of the idea.

Composition of Management Committee

- Chairperson (1)
- Record keeper (1)
- Box keeper (1)
- General Members (2)

Responsibilities Chairperson:

- Represents the Nursery Group to outsiders including Kebele and Woreda offices
- Announce agenda, call meetings and lead and facilitate discussions
- Ensure bye-law and rules are followed, maintain discipline and charge fines if appropriate.
- Resolve conflicts together with observers and/or others to be elected by members
- Has the power to appoint sub-committees if necessary

Responsibilities Record keeper:

- Ensures that all financial transactions take place according to procedure,
- Keep records concerning membership payments,
- Keep records concerning loans,
- Provides information on financial state of the business at start of every meeting,
- Balance cash box after transactions and announces amount present at end of meeting.

Responsibilities of the Box keeper:

- Keep cash box in between meetings
- Do not allow to open the box unless decided by the General Assembly and three authorized committee members are present

Responsibilities of Observers:

- Count money for all transactions (membership, fines, repayments, interest & loans)
- Inform Record Keeper of every transaction
- Assist Record Keeper in balancing cash box and resolving any cash discrepancies
- Assist Chairperson in resolving conflicts.

Election of Management Committee:

- Elections are held every year
- The members of the management committee are elected for a duration of one year
- The maximum consecutive terms is set at two years
- 2/3 of the members must be present to hold elections
- At least two persons must stand for each position
- Each nominee should be supported by at least two members

Removal of members of management committee:

- Any member of the Self-help Nursery Group can call a vote of no confidence in an elected member.
- If this vote carries a 2/3 majority of members, the elected member has to step down and another member has to be elected in his place.
- If an elected member steps down voluntarily, the management committee shall appoint a replacement until the time a new member can be elected.

Meetings

- The revolving fund members shall meet every _____ to pay membership fees, discuss requests/repayment for loans and discuss matters concerning the running of the Self-help Nursery Group/ revolving fund.
- The General Assembly should agree on the amount left in the cash box at the opening and closing of every meeting, after the money counters have performed the counting.

Departure of members of the Self-help Group Nursery/ revolving fund group

- If a member leaves the Self-help Group Nursery/ revolving fund because he/she has no alternative and the other members agree on this, the member receives the amount contributed plus share of interest and fines collected after settling possible outstanding loans.
- If a member leaves the Self-help Group Nursery/revolving fund voluntarily and the other members agree on this, the member receives the amount contributed after settling possible outstanding loans, at the end of the year.
- At the end of the year, expelled member receives the amount contributed after settling possible outstanding loans.
- Expulsion can only take place if a vote carries 2/3 majority of the members Reasons for expulsion are:
- In case of death the recognized heir receives the amount contributed plus share of interest and fines collected after settling possible outstanding loans.

Criteria for Loan Eligibility

- Factors that may be considered:
- Is the member up to date with weekly/monthly savings?
- Does the member regularly attend meetings and finish his job assignment on time?
- Does the member have experience in the activity in question?
- Do members of the group who have experience in a similar activity think the request is for a reasonable and necessary amount?
- Does the member have a reputation of being honest and hardworking?
- Does the member have a reputation for paying his/her debts?

- Does the borrower agreed in front of the public to transfer the input to one other farmer?
- The maximum input borrowed is decided in accordance with the breakdown stated in the plan and agreement reached by all members;
- The maximum length of loan is reasonably proposed by the management committee and decided by the General Assembly.
- Loans can be extended in cases of some catastrophes and/or some unexpected happenings;
- Interest is 10% of total loan to be paid at end of loan period or before extending the loan
- If interest is not allowed (e.g. Muslims) another agreed upon mechanism with equal amount can put-in-place
- If the loan is considered to be uncollectible by the members the guarantors are responsible for repayment of loan without interest after deduction of the savings of the original borrower in the revolving fund
- Other criteria

Funds and Savings

- All members, including management committee are obliged to pay membership fee at the start of every meeting;
- Members borrow inputs either in group or individually, supplied by donors and/or Government, in kind in order pay back similarly to farmer assigned to take it and transfer in the same way;
- Members may contribute an equal agreed upon amount at the start of each year to speed up the growth of the revolving fund;
- All funds collected in the form of membership fees, interest and fines is the property of all members but the one they get in the form of input remains seed money to rotate within whole community
- Inputs remain to be property of the Group and get enlarged to serve as a community fund so as to sustain their development endeavour and accommodate changes.

Inputs supplied by SLMP

Upon receiving the input, a cash payment of 10% of the agreed upon value of the input will be paid into the revolving fund;

- Tree seedlings, grasses and Politian tube
- Fruits and vegetables
- Remaining amount should be paid back in kind within agreed upon period not exceeding 52 weeks;
- If the remaining amount is not paid back within the agreed upon period the input will be collected (depending up on its kind) and distributed to another member according to the above conditions;
- If perishable he/she pays back in cash to buy and replace the input;
- The down payment reverts to the revolving fund and is lost to the member;
- Wheel barrow, watering can, spade, rake, root pruning scissors, seeding tray, pickaxe, buckets and sand sieve could be transferred in the form of start-up gift on farmers' day
- Other

Fines

Non-attendance of meeting without valid reason: _____ ETB

Late for meetings: _____ ETB

Deviation from norms and misbehaving: _____ ETB

Ignoring committee instructions: _____ ETB

Failing to repay loan within agreed time: _____ ETB

Other fines:

Membership List: Name _____ Signature _____**1.3. Roles and responsibilities of important stakeholders**

Most of SLMP intervention requires participation of key stakeholders for successful accomplishment of its objective. Similarly, such nurseries as part of income generating activities also in need of stakeholder's engagement for integrated efforts to achieve anticipated goals. Thus, it is very important to identify key stakeholders with share roles and responsibilities for successful handover/transfer process of central nurseries to target community/user groups.

SLM PCU:

- Support to implement activities as per set standards and working norms
- Provide necessary technical backstops and monitoring to assure success of various livelihood activities carried out by the community within the watershed
- Establish platform and integration with various working groups to provide necessary ToT training manuals for successful capacity building activities
- Provide ToT trainings for respective experts and identified beneficiaries'
- Check and evaluate the contribution of ToTs whether they are implemented or not
- Identify, organize and report practical challenges during the implementation with designing appropriate mitigation action with key stakeholders,
- Responsible to identify potential beneficiaries, their preferred job, estimated budget, prepare and integrate annual plan with other project activities and provide technical supports as per the plan
- Timely transfer of required budgets for districts/Woreda
- Working with cooperative and financial institution to assure proper financial flow
- Based on the actual situation of each district, it is responsible to design various environmental friendly, acceptable by the community, market driven, and profitable income generating packages for selected activities in collaboration with potential stakeholders.
- Asses, organize and report relevant income generating activities for federal PCU

Woreda Sector offices (through SLM TC approach)

- Responsible to coordinate and manage various income generating activities
- Responsible to provide both theoretical and skill trainings related to farming and natural resource management and utilization
- Provide technical support and evaluate implementation according the training provided
- Check livelihood activities which are going to be implemented according set criteria's

- Provide legal documents in collaboration with other stakeholders that enable to provide required inputs and finance provision with how to recollect resource dispersed to the community.
- Responsible to ensure that all livelihood activities are in line of customs and norms of target community
- Provide technical support and follow-up to maintain quality of products as per the standard and quality required by the market
- Provide technical support that producer engage in value added products for better market pricing
- Support farms on any of income generating activities to make them profitable and improve their livelihood.
- Organize various income generating activities identified by the community within the watershed with prioritizing those fulfill the criteria, develop packages and trainings for beneficiaries' in collaboration with key stakeholders.
- Identify best practices, organize and disseminate for potential users
- Provide and facilitate experience sharing within and outside the Woreda
- provide required support in the preparation of activity plan with detail financial requirement and incorporate it in finical plan of the project
- conduct monthly, quarter and annual performance reports to the federal PCU
- Support and follow-up loan payback and monitor revolving fund implemented accordingly with establishing database on loan and revolving fund.
- Avail the budget required for the work on time
- Check the fulfillment of required documents by the beneficiaries' to access the finance
- Provide awareness creation trainings on the important aspect of cooperative and establishing enterprunrship in group
- Establishing enterprise as per the interest of the group
- As per directives of cooperative, provide its support for enterprise to develop their own working directives and bylaws
- Provide bookkeeping and financial management training throughout the implementation period
- Avail the required budget for the implementation timely
- Identify and link with potential market for all kind of products
- As per the standard set, responsible to check and monitor their financial statement , and provide required support
- Follow-up loan repayments
- Provide necessary training on the importance of saving with supporting beneficiaries to continue their saving as per the agreement they made and cooperative regulation
- Support, train and empower women's to develop their confidence and participate in income generating activities through cooperatives, in group and family level
- Ensure that women's participate and fairly benefit from the development program in collaboration with various stakeholder beside provide its support, organizing relevant data, and disseminate the information for any group in need.
- Access and identify relevant income generating activities that benefits women's in special consideration

- Provide skill training mainly on non-taxable income generating activities with ensuring activities implemented accordingly
- Work in collaboration with other stakeholders on the provision of important/required inputs for identified activities
- Provide required technical support for farmers to make them profitable in their business
- Access potential market and establish market chain for products produced by the groups
- Maintain standards and criteria's set for IGA
- Provide technical support and follow-up to produce value-added products that increase incomes of beneficiaries

Kebele Agricultural office

- Provide awareness creation trainings on income generating activities
- Create aweranase for the watershed community on the implementation manuals, criteria's to participate in IGA and precondition to get necessary inputs to run their business
- Identify and priortize beneficiaries as per set criteria's
- Support beneficiaries on planning as per their identified IGAs
- Provide skill training for targeted beneficiaries
- Follow necessary preparation and request appropriate inputs to start the activity
- Establish market linkages
- Fulfill necessary preconditions for contractual agreement
- Ensure any of income generating activities have no negative consequence on the community
- Provide any support during business plan preparation
- Conduct monitoring and evaluation to ensure smooth implementation of activities
- Collect, organize and disseminate relevant information for Woreda administration and key stakeholders
- Access strength and weakness during implementation process and report for stakeholders for their action

Kebele watershed committee

- Create awareness in collaboration with micro-watershed watershed committee about the importance of IGA
- Involve in targeting of beneficiaries
- Support on planning and quantification
- Create awareness on how to get inputs as per set standards and criteria
- Conduct monitoring and evaluation to increase success of the business
- Support on loan repayment and to participate other in the revolving fund

Community watershed committee

- Involve in targeting of the group members
- Participate community in targeting and their approval of the final list
- Provide lists of targeted beneficiaries to kebele watershed committees for their approval
- Create awareness on the criteria's to participate in in the business
- When preconditions are fulfill, report to responsible body to fulfill required inputs
- Provide its support during business plan preparation

Watershed users association

- Once formally established, expected to work as an umbrella institutions

2. References

MoANR (2003). Rural Development Policy and Strategy. Ministry of Agriculture, Ethiopia Addis Ababa.

MoANR (2017). Rural Job Opportunity Creation Strategy. Ministry of Agriculture, Ethiopia, Addis Ababa

SLMP (2018). Nursery Capacity Assessment Report for Forest Development Strategy. Ministry of Agriculture, Ethiopia Addis Ababa

SLMP (2017). Income Generating Activities field Manual. Ministry of Agriculture, Ethiopia, Addis Ababa

SLMP (2019). Guideline for Production and Management of Planting Materials for Watershed Development. Ministry of Agriculture, Ethiopia.