Ethiopian Orthodox Church

Development And Inter-Church Aid Commission

Ten Years Revised Project Proposal

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Background Information

Out of the total population of the country 85% earn their living from agriculture and agriculture is second to none in generating foreign currency for the country. The Ethiopian economy is based on agriculture, which contributes 42% to GDP and more than 80% of exports, and employs 80% of the population. The major agricultural export crop is coffee, providing approximately 26% of Ethiopia's foreign exchange earnings, down from 65% a decade ago because of the slump in coffee prices since the mid-1990s and increases in other exports. Other traditional major agricultural exports are leather, hides and skins, pulses, oilseeds, and the traditional "khat," a leafy narcotic that is chewed. Sugar and gold production has also become important in recent years. Hence, land is the most important asset for Ethiopia.

At every point of production agriculture influences ecosystem, biodiversity, climate and the economy including energy trade and vice versa.

The acceleration of environmental degradation, soil erosion and climate change by human beings has a direct effect on soils, natural forest, land productivity and food security in a given country or locality (IPCC, 2007).

Ethiopia constitutes variety of soils, flora and fauna which make the country one of the centers of biodiversity in the world. On the other hand, this situation is threatened by deforestation and soil erosion by water. Population pressure, mismanagement of agricultural lands, overgrazing and the prevailing climate change are some of the causes for soil erosion and degradation of land. In Ethiopia, soil erosion by water constitutes the most widespread and damaging process of land degradation. The amount of soil depleted by this is estimated to be 1.3 billion tones every year (Hurni, 1988). Competition for the natural resources is becoming intense from time to time and has now reached at its highest stage in the country and natural resources degradation is increasing in an alarming rate in most parts of the country. Especially in the highlands (areas above 1500 meters above seal level)) where much of the agricultural activities are implemented and 88% of the population of the country & 70% of livestock population reside. The highlands occupies about 40% of the total land mass of the country.

The decline of land productivity and soil fertility in Ethiopia lead to poverty, loss of biodiversity and food insecurity (FAO, 2000). The Ethiopian highlands reclamation study by FAO (1986) concludes that erosion rate were estimated as high as 130 tones/hectare/year for croplands and 35 tones/hectare/year on average for all lands in highland Ethiopia, but more emphasize was the greater nutrient losses like soil organic matter for crop production.

In the Northern Ethiopia, where most of the forests have been converted to agricultural lands, small fragments of patches of forests remain mainly around churches. A study conducted in 28 church forests indicated that altitude is the main factor determining species composition while human interference determines structural composition of forests, at higher altitude, forests are less diverse and dominance by a single to few species is strong. Particularly, cattle grazing strongly determines forest structure and species composition in the understorey and is expected to have a strong long-term effect on the whole forest structure and composition (Alemayehu Wassie, 2007).

In spite of what the Ethiopian Church has done to conserve significant proportions of forests in Ethiopia, its forests do not receive the recognition and support they deserve. Because of this negligence, these

forests are waiting for further degradation and possible entire elimination comparable the tragic fate of the larger forests across the landscape in northern Ethiopia. Maintaining church forests is maintaining large part of forest resources of northern Ethiopia(Alemayehu Wassie , 2007).

Ecosystems which were untouched by human beings such as natural forests in steep lands, monasteries and church yards are now being affected by human beings for getting firewood and additional land for crop production. As a result of these land use pattern in the country is in a continuous change.

That is why concern about the declining opportunities for future generations to meet their basic needs was the main reason for the change in development paradigm in the late 1980 at Global level. To date, maintaining the livelihood systems within limited natural resources vis-à-vis the increasing rates of population growth and effects of climate change is a critical issue for the country in general.

According to Federal ministry of Agriculture and rural development report more than 5.6 million people face acute shortage of food and need food assistance in the year 2010 besides the 7 million safety net beneficiaries.

Taking into consideration the current natural resources degradation especially forest and land resources, livelihoods and food security situations, the Ethiopian government has designed pertinent policies to meet MDGs and Development and Transformation Program. Among others, it is currently implementing sustainable land management, safety net and agricultural growth promotion programs. However, due to limited capacity, for example, the government is operating sustainable land management program only in few watersheds.

The Ethiopian Orthodox-Church has laid the foundation to the cultural development and heritage, civilization, independence and the basic education built in the country. The church has served the Ethiopian people by protecting and passing beliefs and culture, writing and education, art and ancient relics to succeeding generations. Alongside with their spiritual services, the Monasteries and Churches have been serving as schools of literate education, church music, of the Holy Books, handcrafts and arts, and other several types of cultural heritages. They have been serving as museums for relics and libraries. EOC is a source of multi cultural values such as church music, cultural dressing, brana(hide) manuscripts, traditional music instruments, arts, heritage, traditional schools, social groups (Edir, Senbete), cultural medicines and monastic lifestyle, etc.

As in the past, traditional church schools and clergy training programs continues to play a pivotal role and have potential to address critical issues such as poverty reduction, climate change adaptations and socio-economic development of the country.

Given the above solid facts the Ethiopian Orthodox Church Development and inter Church Aid Commission is planning to address the following major issues of the rural community.

1. Improving natural resources base
2. Rural livelihoods improvement
3. Carbon development
4. Environmentally friendly energy sources promotion

5. Capacity building of clergy & monastic community and

6. Socio-infrastructural development of monastic communities

2. Opportunities

There are good opportunities for development actors in the area of natural resources management, environmental protection and climate change adaptation and mitigation, food security, poverty eradication, conservation of cultural heritages in Ethiopia. These include but not limited to:

- Parallel to MDG the Ethiopian government has put in place five years (2010/2011 -2014/2015) Growth and Transformation Plan (GTP).
- In line with the above MDG & GTP the Federal Ministry of Agriculture & Rural Development is carrying out:
    - Sustainable land management activities & safety net program in woredas designated as food insecure, and
    - Agricultural growth program in woredas/districts/ designated as relatively agriculturally productive.
- The Ethiopian government has adopted declaration of World summit and put in place climate change policy. The Ethiopian Environmental protection Authority is mandated to ensure the implementation of this policy.
- User's right of land has been ensured through land certification.
- The government of Ethiopia has given due attention to cultural heritage conservation & wildlife conservation through the Ministry of Tourism & Culture and Wildlife Conservation Authority respectively.
- Already there is ongoing Carbon credit experience in Humbo area of Southern Nations, Nationalities Region (SNNPR) of the country.
- The Ethiopian Orthodox Tewahido Church's long standing forest management experience at parish churches and monasteries as well as its development wing, EOC-DICAC's, forty years of experience in the management of natural resources, food security/livelihood improvement, socio-economic development, humanitarian support including refugee support, emergency relief & rehabilitation etc.
- The Church's structure goes down to the grass root level,
- About 43.5 million followers, more than 500 thousand clergy, 70,000 parish Churches and monasteries and about 6.5 million registered Sunday school youth all over the country. Clergy and Sunday school youth have the capacity in terms of mobilizing the community. This is an added value and the project plans to use this capacity as strategy to execute planned development activities.

- Followers & non-followers trust the Church, clergy & monastic community.
- Sector Ministry offices are interested to collaborate with EOC-DICAC.
- Worldwide and funding partners interest to provide financial support to less developed counties to meet MDG and for mitigation & adaptation of climate change.

3. Institutional Information

The Ethiopian Orthodox Tewahido Church is the oldest Church in Ethiopia, which played and continues to play an important role in development and humanitarian activities including the conservation national biodiversity, nature and heritage since thousands of years back. The church's doctrine commands to do so. This tradition of passing from one generation to the other is believed to contribute to the knowledge of the society on natural resources and the current forest cover in churches and monasteries. It has a long experience in conserving the natural resources of the country. It has a tradition for planting tree and fruits in the churches and monasteries to conserve the land and use the byproducts as source of feed for domestic animals. Thus, scholars are using its resources for their research work and the production of modern medicines. The Church has a structure that goes down to the grass root level. It has about 43.5 million followers, more than 500 thousand clergy, 70,000 parish Churches and monasteries and about 6.5 million registered Sunday school youth all over the country. The clergy and monastic community, who live within and in harmony with the local residents and other religions in the country, helped the Church to be trusted by followers and non-followers which in turn helped the church and EOC-DICAC to mobilizing the community for any development activity. The Church is also highly trusted by its followers & non-followers in the country.

The foresighted fathers of the church established the development wing of the church, EOC-DICAC, in 1972 with a legal notice no. 415. The values of the Church are the basis for EOC-DICAC. Hence, since its establishment it is devoted to help the poor and conserve the natural resources of the country through funds obtained from both local and international sources. In the last four decades of cumulative experience, it has demonstrated its firm commitment by being directly responsible for supporting and coordinating relief, rehabilitation and development efforts in the country and has been successful in addressing community needs and development gaps of the society in general.

EOC-DICAC has worked bilaterally and in collaboration with other non-governmental organization and faith based organizations such as the Ethiopian Inter-faith Dialogue for Development Action (EIFDDA). The organization is endowed with experienced and committed professionals, material assets and facilities which are crucial for the project implementation. It has been administrating huge funds obtained for example from USAID, global funds, EU, UNHCR, IOCC, CA, NCA, DCA, EED, Bread for the world, ICCO, ARC, etc to implement HIV/AIDS prevention and control, food security/rural livelihood improvement, community based health and nutrition, environmental protection, potable water supply, hygiene and sanitation, refugees and returnees social service projects. The organization has also rich experience in working with government institutions such as the Federal Ministry of Health and research institutions and many other regional, zonal and woreda level government bureaus.

EOC-DICAC is also a founding member of CCRDA, EIFDDA, JOEP and ACT international. It is a member of the Ethiopian Civil Society Network on Climate Change (ECSNCC) and leading the forest and protected areas working group within the network. It has implemented grass roots participatory rural development project with funds secured via joint cooperation from bilateral, international and ecumenical resources. The structure of the church, which is extended up-to the grass root level is also an asset especially to aware and capacitate the community towards sustainable land management and resources utilization by involving the clergies as development actors.

Land degradation coupled with the changing climate is affecting our people in a multidimensional way. EOC-DICAC is doing its utmost effort in overcoming poverty and degradation of natural resources by implementing different activities at a grass roots level in a participatory manner. To mention some of the areas where EOC-DICAC has executed the rehabilitation and conservation of degraded lands in food security/rural livelihood improvement/integrated rural development projects so far include but not limited to:

- GEF-Nile Basin Initiative supported project in Goncha area, land rehabilitation in Soketa, Dahana, Ensaro, Goncha, Hager Mariam, Mida, Wogera, Ginager, Wadla, Mekdela, Dawnt, other woredas of Farm forestry project areas etc of Amhara region,
- in Kilte awelalo, Saharti Samere, Hintalo, Endamehoni, Aynalem, Mehoni etc areas of Tigray region,
- in Sodo, Kella, Kedida Gamela and Gimbo areas of Southern nations and nationalities peoples region,
- In Limu Seka and Kokir areas of Oromyia region and
- The vast environmental rehabilitation in various woredas of Tigray region.

The introductions of solar energy, fuel saving stoves and biogas in the project areas is believed to substitute fuel-wood and diversify domestic energy and reduce pressure on forests. EOC-DICAC has been implementing activities through participatory approaches in which beneficiaries, concerned government offices and CBOs genuinely participated throughout the project cycle. As a result of its long standing experience it has established a seven-point model development approach; Integrative determinants approach, convergence, partnership approach, iterative course correction through systematic reflection, community participation, reaching critical mass and learning driven methods. These approaches are all about assessing the status of each determinants have impact on each other and create a chain of negative impacts and it assesses those with greater influence on the whole system on human well being and food security.

In the effort to mitigate the degradation of natural resources and climate change to ensuring sustainable food security through the implementation of sustainable land management in a watershed management approach in the country, EOC-DICAC is interested to collaborate with the Ministry of Agriculture and willing to execute activities inline with the Ministry's plan of action set forth for watersheds that are currently funded by World Bank and other funding partners.

4. Goal

The overall Goal of the project is to contribute to improved livelihoods, poverty reduction, climate change adaptation and cultural heritage conservation of the country through sound & environmentally friendly management of natural resources.

5. Objectives of the Project

The project attempts to attain the following specific objectives.

Specific Objective 1. To enhance food security of small holder farmers, and monastic and surrounding communities through the sustainable land management in a watershed management approach and by engaging communities in the management of church forests & carbon trading.

Intermediate result 1: Protect Church Forests

Description and problem statement

In Ethiopia there are some 70,000 parishes, 45% of which have forests, and some 3,000 monasteries, 75% of which are surrounded by forests. Most of these forests are located uphill and upstream from villages where significant soil degradation is occurring. Understanding the role of the church forests in the management of watersheds is critical for addressing food security and climate change issues in Ethiopia. The Church has longstanding experience in managing forests especially in the Northern parts of the country where land degradation is most severe and almost all natural forest are located in the premises of Monasteries/Nunneries and parish church.

Study conducted by Mr. Tull (2011) on the forest of Rama Kidist Kidane Miheret monastery indicated that although the forest lived for a century due to the commitment of holy fathers and mothers who sacrificed themselves as the natural resource ambassadors without any reward for the provision of biodiversity conservation in that challenging situations, it is now in the ocean of deforestation as it is surrounded by completely cleared lands. The same study depicted out of the 135 hectares moderately dense vegetation forest 96 hectares is natural forest (The major species are Podocarpus Falactus, Juniperous Procera, Olea Africania, Mereze, Seged, Embese & Gemero) of very aged trees (with DBH ranging up to 145 for Podocarpus Falcatus the oldest tree species) located on the degraded lands. According to church scholars most of these trees are more than 500 years old. The forest is spatial variable both in structure and species composition probably due to a combination of micro topography and past human uses and disturbances. Due to the external factors which strongly affecting the forest, currently, the forest is protected by employing guard in collaboration with the Woreda /District/.

In the same study assessment was carried out on forests of Abune Guba monastery where only 23 hectare is covered with forest vis-à-vis 100 ha forest cover 40 years ago. Before 40 years, all lands between Abune Libanos and Abune Guba were covered by forest. Currently, remnant forests are found only surrounding both monasteries, leaving the rest of huge area of land degraded.

The decline in the forest cover of this monastery is due to famine and repeatedly drought, expansion of agriculture and encroachment by surrounding community as monks who look after forests migrated from the monastery. Scholar's remarked natural resource in the monastery does not come as a mere of chance it is the result of commitments and strongly spiritual and theological base of natural resource management philosophy of their ancestors.

Studies conducted by Dr. Alemayehu (2002 & 2007) are in agreement with the above. Although the local people respect the integrity of the church forests many of the church forests are threatened by the increasing cattle population and increasing demand for wood products and farm lands. Human influence through livestock grazing and wood harvest has a strong effect on the structural composition of forests, but not on species richness and diversity except for species richness in the undergrowth. The interaction effect of altitude with human influence (mainly cattele interference) determines the species composition of the undergrowth of church forests. Wood harvest also strongly affects wood stock and aggravates degradation of church forests.

The church has been using woods from church forests for church construction and mass services in a reasonable sustainable way of generations. However, the logging in some of the churches very recently is becoming much more intensive and in the interest of individuals instead of the church community. Undefined forest borders and irregular forest edges surrounded by individual land holdings have led to continuous but 'hidden' encroachments of agricultural fields into the forest. The conversion of the forest land to other land forms occurs in steps of only a few meters every year but given the small size of the forest, such changes might drastically reduce forest areas in the coming years and even lead to disappearance of forests (Alemayehu Wassie, 2007).

In spite of the importance church forests, the other challenge is that there is no GIS supported established forest resources inventory, which will help preserve and provide the necessary support so that they can continue to contribute to the nation's socio-economic development.

Rationale

Monasteries are located in isolated underdeveloped areas where there is often no or little NGO activity. They traditionally champion the interests of the local peasant communities, especially the marginalized and disadvantaged, those affected by natural disasters, orphans, widows etc. Their moral authority means that they are well trusted and can play a role in the introduction of new intermediate technology, and the preservation of useful stores of indigenous knowledge.

Monasteries and Churches are traditional centers for the protection of indigenous bio-diversity, which various scholars have recently indicated can constitute the basis for wider ecological projects (See: Dr. Alemayehu Wassie and Sacred Forests). As monasteries are already reservoirs of bio-diversity, this need

to be protected and enhanced through different methods. The monastic spirituality can also constitute the basis for indigenously orientated ecological ideology, which appeals to local sentiments.

In spite of their contributions, monasteries were generally deprived of a large part of their landholdings during the communist period. Consequently, they need to make more intensive use of what they have, through improved agricultural techniques irrigation etc. As highly respected members of the local communities with great moral authority, they can act as pioneers for the introduction of intermediate technology, which could be passed on to the local inhabitants. New ideas could include environmental conservation and carbon trading. Furthermore, this could be enhanced by application of local knowledge and techniques passed down through the ages.

Monasteries have a pool of reliable disciplined labor, able to perform different tasks to a tight schedule and in organized manner. This is of great benefit for agricultural research and extension. Furthermore, monasteries can be used as centers of demonstration and learning, for ecological projects, especially that mitigating climate change, enhancing carbon trading and improved agricultural practices.

Church forests have national significance by playing immense role in terms of:

- Rehabilitating degraded lands as they are located on steep slopes and surrounded by degraded areas. Especially, in the northern part of the country it has been as the only source of seeds of native species. Trees in general play vital role in the management of watersheds.
- Recharging springs and ground water that is why spring discharges around churches and monasteries are in a better situation while others dry because of absence of up-stream vegetation cover.
- Conserving wildlife. Forests of around monasteries & parish churches are found to be good habitat for many kinds wild animals.
- Ecotourism (smokeless industry) & tourist attractions in addition of being heritages,
- Urban greening & regulating temperature.
- Being center of producing bio-fuel (of Jatropha, Caster tree, etc).
- Being centre for education and forestry development.
- Source of minor forest products and income generating activities such as apiculture, etc.
- They could be centers for the passing on of intermediate agricultural techniques, and innovations such as solar heating to the wider population.

Dr. Alemayehu, in his study (2007) recommended the need to interconnecting remnant forests by vegetation corridors following natural terrain or steam lines, creating buffer areas around them, excluding cattle interference, reducing intensity of wood harvest and developing more patches in the landscape as a possible matrix management to facilitate propagules and germplasm flow, sustain forests and restore the whole landscape. Also, immediate surrounding areas of the forest fragments need to be available to serve as buffer zone for regeneration of species. In other words, the surrounding lands should be free from farming and grazing interventions to enable seedlings of existing tree species colonize and restore the forest on the degraded lands.

According to Dr. Alemayehu (2007), the existing church forests provide great opportunity for restoration. They can serve as a stepping stones to restore the surrounding degraded lands. They can lead area enclosure programs to full scale restoration trajectory and in turn enclosures can ensure future sustainability of church forests. Therefore, preserving and restoring the remnant of these indigenous forests, which are the home for native species, is, undoubtedly, an urgent task before their complete elimination.

Ecological restoration should both focus on maintaining forest species diversity and ecosystem services of the last remaining forests by creating conditions that facilitate regeneration of the various species within the forest as well as expanding forest area, interconnecting patches and creating new ones. The major management intervention that improves regeneration of tree species in church forests presented in priority are: reducing grazing intensity, reducing intensity of wood harvest, transplanting seedlings, sowing seeds combining with litter removal and selected/creating microsites.

If management intervention in churches forests, plantation around church forests and area enclosure program are well integrated, restoration of lost vegetation in northern Ethiopia should again be possible. This actually demands more integrated effort from different stakeholders. Continued support, law and policy enforcement from state, dedication from church clergy, and awareness creation to get trustworthy of the community are crucial.

Action points:

- ◊ GIS suitability assessment to identify highest priority forest areas for watershed management and carbon development –ie. those areas that meet a set of criteria to evaluate their carbon potential (ownership, quantify of forests, watersheds).
- ◊ Selection of areas that are highest priority church forests to address climate change issues. The analysis of these sites will be further refined through feasibility analysis of carbon development on select sites (see cross cutting issues).
- ◊ Identification of interventions necessary for EOC-DIDAC to protect church forests. Such interventions could include:
    - o enhancing the capacity of communities to engage in management of church forests
    - o ensuring that rights of access and use of resources by communities are clearly understood and applied through sound management plans
    - o foresting collaboration and support for community based natural resource management
    - o in some cases, protection of church forests may include social fencing, signage and increased patrolling.

Major activities:

1. Create awareness of the community,
2. Provide environmental award for the church and financial support for the environmental services the church forests are providing to enable them execute protection and enrichment planting ,
3. Identify, inventorise forest cover/biomass and delineate church forests
4. Establish GIS for church forests.

Expected results

- Identification of subset of forest areas that overlay with watersheds
- Location of remaining forest patches surrounding parishes and monasteries
- Selection of forest areas for development of carbon feasibility studies
- Identification of interventions necessary for EOC-DICAC to protect church forests.
- Community awareness on church forest contribution, protection & management create. As a result increased concern by all community members and stakeholders on church forest,
- GIS established for church forests,
- Priority church forests identified,
- Church forests demarcated, inventorised & estimation of forest cover/biomass of conducted,
- The demonstrations would be effective in improving local communities' livelihood.
- Better management of church forests,
- Improved micro climate of the project area,
- Better state for wildlife conservation,
- Improvement for ground and spring water sources,
- Increased aesthetic value, tourist attraction and church forests become suitable for ecotourism,
- Benefit sharing mechanism established among the church and surrounding community and community and church benefits improved.

Indicative budget

A total of Birr 32,475,000 (1,910,294 USD) is required to execute this thematic area.

Detailed budget

S/No	Activity Description	Unit	Qty	Total Price Eth. Birr	USD
1	Create awareness of the community	No	1	150,000	8824
2	Provide environmental award for the church and financial support for the environmental services the church forests are providing to enable them execute protection and enrichment planting	No	1	20,000,000	1176471
3	Identify, inventorise forest cover/biomass and delineate church forests	No	Ls	5,000,000	294118

4	Establish GIS for church forests	Ls		600,000	35294
4	Personnel	Ls		1,500,000	88235
5	Administration cost	Ls		2,500,000	147059
6	Overhead	Ls		2,725,000	160294
	Total			**32,475,000**	**1,910,294**

Intermediate result 2: Improved rural food security and sustainable land management practices

Description and problem statement

Although 85% of the total population earn their living from agriculture, food insecurity is a critical issue in Ethiopia. Household food security remains an important are of concern especially in the traditional drought prone areas of the country. Food availability has dramatically improved in Ethiopia since the last few years. In spite of this very encouraging result more than 5.6 million people face acute shortage of food and need food assistance in the year 2010 besides the 7 million safety net beneficiaries indicating the seriousness of food insecurity.

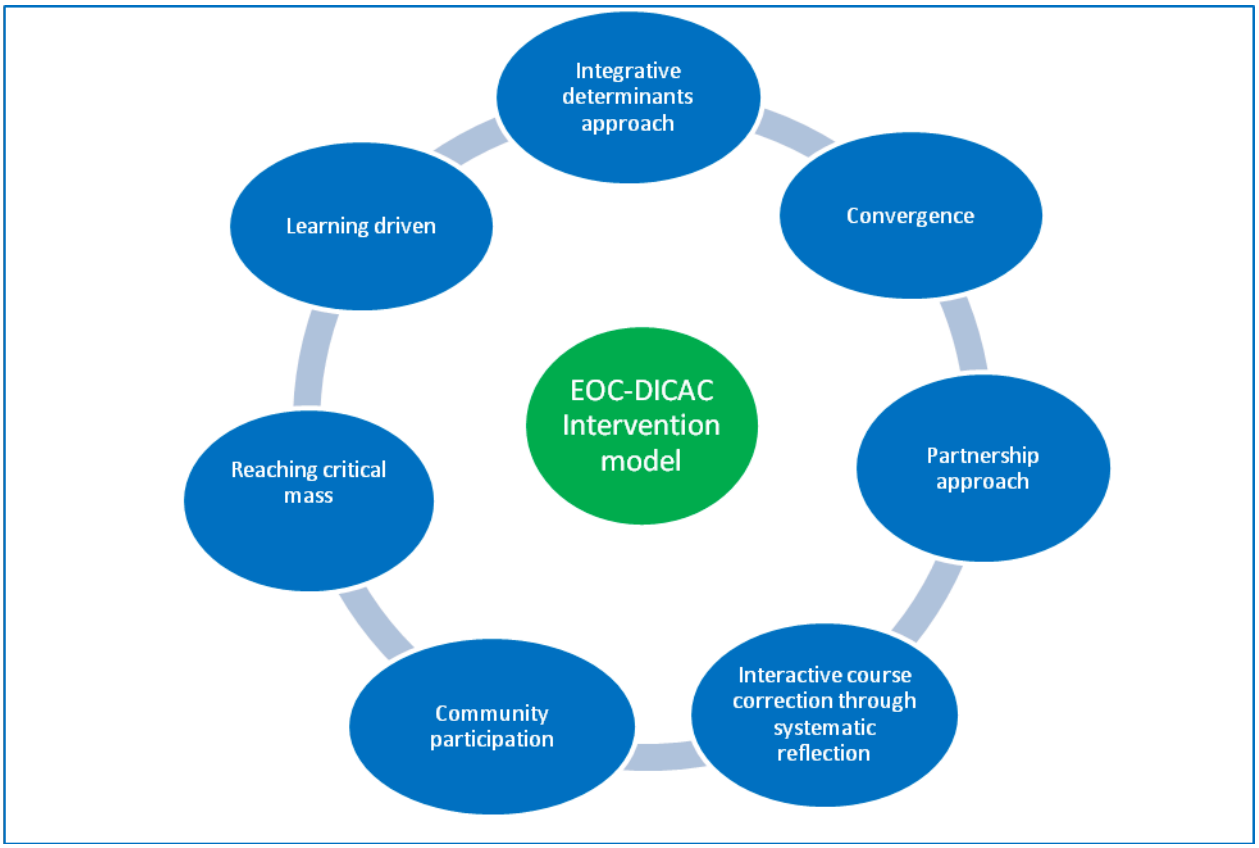
The dwindling of natural forest cover in the country overtime has led to loss of topsoil fertility at critical rate (Mulugeta and Karl, 2008). This situation is aggravated by frequent cultivation, mismanagement and improper land-use system; accelerating soil erosion.

Among other factors declining soil fertility and contributes to declining crop and forage production and of course aggravate poverty situation in the country. It is also known that soil erosion reduces rootable soil depth, removes soil organic matter and other soil nutrients and decreases the water holding and buffering capacities of soils. Soil erosion affects not only the land it eroded but also the down slope flat lands by covering with sediments and undesirable debris. On the other hand, the change of soil fertility also affects the dynamics of land use and vise versa. It is also worth noting that the ever rising temperatures, extreme weathers, fluctuations of rainfall, relocating of flora and fauna and the recurrence of drought and expansion of desertification in the country are manifestations of climate Change.

The seven point model which EOC-DICAC developed through the implementation of food security projects depicts the importance of integrative determinants, convergence, partnership approach, iterative

course correction through systematic reflection, community participation, reaching critical mass and learning driven approaches. Experience also showed watershed management approach to be more effective as it has synergetic effect/value in addressing multifaceted dimensional effects of land degradation and climate change.

The Seven-Point Model Development Approach



As a result of climate change, seasonal rains become unreliable or erratic causing upstream soil erosion and down stream flooding. These in turn make crop & forage production more uncertain, difficult to sustain lives (human & livestock) and challenging for the livelihood strategies and copping mechanisms particularly communities of subsistence farming in the country. The agricultural productivity is inevitably intertwined with persistent food insecurity and widespread poverty.

Furthermore, although there are some potentials in terms of labor for example, at household and community levels, rural communities constrained by lack of skill & financial capital to carryout alternative sources of income to build resilience to shock.

Rationale

For countries like Ethiopia, proper resource management and devising appropriate local level strategies are key factors to overcome the consequences of soil fertility loss and climate change on sectors like agricultural and health and the national economy at large. In this regard, the role of indigenous resource management strategies and adaptation mechanisms to climate change effects would be more important than external solutions.

Although sustainable land management at country level has been taken up as a solution since thirty years back, the impacts recorded so far are not adequate. One issue which was either forgotten or underestimated is the paradigm of time dimension in natural resource management. The fact that parameters of natural resource generally change slowly, for instance for soil related ones the time horizon to get impact on relevant parameters may take decades, one has to consider the time dimension while attempting change on NRM.

According to Oldeman *et.al*, 1990: Physical and biological soil conservation structures have the capacity to change the physical and chemical properties of the soil (Oldeman *et.al*, 1990: Gete., 2000).

Besides the traditional knowledge, various types of soil and water conservation technologies and implementation strategies/approaches have already been introduced in the country. However, it was largely focused on physical structures/measures rather than focusing on an integrative and watershed management approach. Consequently, efforts made so far were not as successful as expected.

Other contributing factors to poor success include the top down approach, improper selection of technology, absence of genuine community participation, lack of clear policy on user rights and ownership and absence of replication and sustainability strategies.

Notwithstanding the efforts made in executing various soil and water conservation activities and in putting in place various types of policies such as Agricultural led Industrial Development, poverty reduction policies, rural land certification, and sustainable natural resource management is still a challenge in the country vis-à-vis the magnitude and chronic nature of the problem.

Generally, the current situation of land degradation in the country is most serious and needs critical thinking, action and joint effort of all practitioners including civil societies & faith based organizations to overcome the degradation of natural resources and rescue lives (human & animals).

The food security situation of rural communities will be improved through diverse interventions tailored to meet site-specific needs. Environmental stewardship will be incorporated in all land and water management practices and other income generating activities to ensure sustainability & sound management of the resource base. Results of this intervention will:

- enhance community capacity for adaptation to climate change, and will reduce incentives for illegal encroachment and exploitation of church forest resources.
- improve the income level of the monastic community and its environs by 20% at the end of 2017.
- create employment opportunity to the surrounding people.
- create learning center for improved technology demonstration for & dissemination of technology to the surrounding community.

Action points:

- ◊ Promote and support indigenous natural resource management practices and adaptive strategies
- ◊ Promote the regeneration of natural woodlands and planting of woodlots in demarcated communal areas to harvest multiple products under sustainable management plans and reduce pressure on church forests.
- ◊ Diversify farming using improved crops and varieties with high yielding, disease-resistant, drought-tolerant characteristics adapted to the local agro-ecology, reducing vulnerability to food insecurity using on-farm tested outcomes of research institutes or action researches.
- ◊ Support the market (value chain) oriented production of:
    - o perennials & annual crops in selected highland areas to increase incomes with community managed improved micro irrigation and the added conservation benefits of reduced runoff and erosion.
    - o beekeeping, poultry, small ruminants, dairy farm etc through promoting organic farming/ bio-farm/agro-forestry.
    - o off farm income generating activities (Bread Bakery, weaving, sewing, embroidery etc)

Major activities

a. Promotion and support natural resources management (biological and physical soil and water conservation measures) using locally accepted/adaptive strategies/indigenous & appropriate:
    i. Degraded communal land reclamation and gully rehabilitation,
    ii. Farmland and homesteads environmental protection measures,
b. Developing the capacity of the farming community with regards to natural resources management using different area specific and locally adopted mechanisms,
c. Develop community managed irrigation schemes,
d. In collaboration with research institutions conduct problem oriented action research, market (value chain) oriented crop production,
e. Promote market (value chain) oriented beekeeping, poultry, small ruminants, dairy farm etc through promoting organic farming/ bio-farm/agro-forestry,
f. Promote market (value chain) oriented off farm income generating activities (Bread Bakery, weaving, sewing, embroidery etc).
g. Defuse climate change adaptation, sustainable land management innovative technologies and strategies in a learning driven approach through demonstration by involving farmers, government offices, research institutions and universities as appropriate.

Expected results

- ➢ Local capacity in natural resources management and land management improved.
- ➢ Appropriate natural resources protection and management practices adopted.
- ➢ Private & community woodlots enhanced.
- ➢ Increased concern and awareness of all community members and stakeholders on the natural resource management and sustainable land use and
- ➢ Agricultural production and productivity improved.
- ➢ Market (value chain) oriented crop, livestock and off farm produces promoted.
- ➢ Income sources diversified, income levels of local community increased and hence improved resilience & reduced vulnerability to shocks.

Indicative budget

A total of Birr 672,450,000 **(**39,555,882 USD) is required to address this intermediate result.

Detailed budget

S/No	Activity Description	Unit	Qty	Unit Price Eth. Birr	USD
1	Project proposal preparation	No	1	300,000	
2	Execution of SLM activities				
	NRM			80,000,000	
	Agriculture			40,000,000	
	Water supply			50,000,000	
	Access road			40,000,000	
	Health			40,000,000	
	Education			80,000,000	
	Sub total			330,000,000	
3	Execution off farm IGA	No	Ls	10,000,000	
3	Expense for Vehicle rent & fuel	Ls		300,000	
4	Field work/perdiem	Ls		100,000	
5	Stationary, Photocopy, Telephone	Ls		50,000	
6	Monitoring & Evaluation	Ls		500,000	
7	Project staff			1,500,000	
	Total			**672,450,000**	**39,555,882**

Intermediate result 3: Carbon Development

Description & problem statement

Climate change is a global issue which is mainly attributed to carbon emission by the northern countries. In the less developed countries like Ethiopia this situation is aggravated degradation of natural forests.

As a result of climate change, seasonal rains in Ethiopia become increasingly unreliable or erratic, causing droughts or flooding which in turn results in ever more uncertain crop production, making subsistence farming and livestock production more and more precarious and unpredictable. The consequences of climate change are becoming serious and challenging for the livelihood strategies and coping mechanisms of the farming communities. Extreme dependence of the 85% of the country's population on land and its resources for survival makes this situation more severe.

Hence, this situation calls for immediate action with regards to the implementation of all possible climate change mitigation and adaptation strategies.

Rationale

Within the framework described above, emphasis will be placed the important cross-cutting initiative of the development of carbon markets and related revenue streams as a way to diversity household incomes.

Experience of carbon development project initiated by World Vision/Ethiopia enabled communities in Humbo of Southern Nations, Nationalities Region (SNNPR) of the country shows that beneficiaries benefit from carbon credit in three trenches. Given the high level of forest endowment of Orthodox Tewahid Churches, this kind of experience is an indication of the possibilities of church to involve by expediting the potentials of forests of monastic and parish churches to generate income for the communities within and around monasteries/nunneries and parish churches.

Hence, given in country and out country experiences Terra Global Capital (Terra), as a subcontractor to EOC-DICAC, will play a lead role in developing the high potential of carbon credits as a source of sustainable revenue for the communities surrounding the church forests.

Activities that will be assessed for their potential to generate carbon benefits include: tree planting, natural woodland regeneration, agro-forestry, conservation agriculture, soil and water conservation practices, improved management of existing woodlands, avoided deforestation and degradation. To the extent that these reductions are eligible under a recognized carbon standard, and are additional to what would be achieved in the absence of the project, they are expected to be eligible for carbon credits. In addition to direct revenue, increased storage of carbon in soils and vegetation has co-benefits of increased productivity of natural resource based enterprises, as well as enhancement of ecosystem services such as biodiversity and water quality protection, which have global and downstream benefits. In partnership with Terra, EOC-DICAC will conduct the project implementation activities necessary to achieve these carbon benefits.

Based on workplans that will be developed, several discrete carbon development projects may be feasible from a subset of the same 70,000 parish churches 7 monastery forests. These projects are likely to include Reduced Emissions from Deforestation and Degradation (REDD), Afforestation/Reforestation (A/R), and Agricultural Land Management (ALM). In order to determine the specific VCS Project typologies that are present within the EOC forest areas, Terra will review all available background data relating to legal land-use classifications, allowable land uses, drivers, agents and underlying causes of deforestation and planned project activities.

To prioritize among the 70,000 parish churches & monasteries Terra will initially conduct a GIS suitability assessment to prioritize church forest areas that, among other criteria, can provide significant revenue from carbon development.

The parameters to be used for the assessment include:

- Overlay of the location of forest areas (Globcover) with critical watersheds (SRTM) in Ethiopia
- Overlay GPS coordinates of EOC locations (provided by EOC)
- Select forest patches which contain EOC locations
- Verify with Google Earth high resolution imagery

Detailed delineation of project sites with full feasibility assessments will then be conducted to support the process of carbon development and to inform stakeholders regarding the potential benefits of their participation.

For each identified CA, Terra will determine whether an existing, approved methodology may be applied, or whether there will be need to develop or adapt a new methodology. This will involve an assessment of

the eligibility criteria and allowable project activities of approved VCS methodologies of the same VCS project typology as the CAs identified in the EOC forest areas.

Once methodology requirements have been established for each CA, Terra will be able to determine whether CAs may be combined into one Project Document (PD) for the VCS. The potential to group projects under the VCS will also be assessed, which would allow the inclusion of additional forest areas subsequent to validation. Terra will also have responsibility for the carbon development components of the pilot project.

Study conducted on forests of even parish churches clearly indicated that the numbers of individual trees per hector conserved were comparable with trees per hector in the other forests in the country, which shows the churches contribution for forests conservation. On the other hand, the carbon sequestered in this forest is higher than most other forests in the country, indicating potential contribution of church forest for carbon sequestration and urban climate regulation (Tulu Tolla, 2011).

The same study depicted significant carbon sequestration difference between indigenous and exotic tree species of the same age, which is most important for climate change adoption as church forests are mainly composed of native species. Hence, the study concluded church forests potential for climate change adaptation, carbon market and urban greening.

By assessing the potential and determine the role of church forests towards contributing against carbon emission or climate change adaptation it would be possible to facilitate carbon trading while protecting forests through community based participatory approach. Benefit sharing mechanism will also be designed to enable communities within and around churches and monasteries get access to carbon trade market. Maximum and sustained benefits will be ensured through synergetic forest conservation with other socio-economic development in watershed management approach.

Major Activities

1. Complete 2-3 Feasibility Studies of selected church forests and surrounding areas
2. Review approved methodologies (that are applicable)
3. Determine whether existing methodology can be adapted to project or if new methodology must be developed
4. Review methodology draft, and facilitate external review if desired (if applicable)
5. Develop a detailed collaborative Work Plan which outlines the roles and responsibilities of all project partners during Carbon offset creation
6. Education, endorsement and consent of participating communities
7. Develop, or adapt existing, Standard Operating Procedures (SOPs) for biomass inventories and social appraisals
8. Develop sampling design and framework for implementing biomass inventories and social appraisals
9. Carry out social appraisals and biomass inventories
10. Carry out carbon calculations for VCS PD, including:
    - QA/QC on boundary demarcation, biomass & social appraisal data
    - Project specific land-classification
    - Development of a forward looking baseline with remote sensing and ground data
    - Calculation of biomass/carbon at t=0
    - Ex-ante calculation of carbon under the project scenario
    - Calculation of the non-biomass related emissions

· Estimation of leakage potential

11. Write VCS PD, including:
    · Project background, actions and supporting data
    · Calculation of additionality
    · Calculation of Risk Buffer
    · Development of monitoring plan to cover data requirements and measurement methods for determination of ex-post carbon credits and leakage
12. Write CCB Project Document
13. Review VCS (and CCB) PD
14. Finalize VCS (and CCB) PD

Expected results

1. Identification of sites to be included in feasibility study (2-3 areas)
2. Carbon project developed and generating income for communities surrounding selected pilot church forest.
3. Carbon sequestration potential of some forests will be estimated.
4. By conserving the environment, popularizing the idea of carbon trading and encouraging a sense of ecological stewardship, monasteries could play a role in combating the effects of climate change and reducing global warming.
5. Established climate adaptation system.
6. Research in and forest type in the country are not conducted. Therefore, it is pertinent to recommend a similar study in similar or other forest types in the country.

Indicative budget

A total of 5,000,000Birr (294118 USD is required to execute this inter mediate result.

Intermediate result 4: To introduce environmentally friendly energy saving bio-gas digester in the monasteries and their environs

Description and problem statement

Monastic and rural communities use wood and cow dung for cooking and gasoil for lighting. With increasing population or global markets these row materials are either scares or becoming expensive. On the other hand, the methodology of application is not environmentally friendly and create health problem. Hence, it is of paramount importance to carry out the following activities.

Rationale

Given the problems of the traditional methods, the installation of biogas digester as alternative source of energy for monastic community and their environs is most advantageous to overcome the consequences of traditional exercise. Some of the positive features of biogas digesters are:

- The availability of cow dung in rural areas.
- The existing proven experience on bio-gas digester in some monasteries and in the country in general.

- The suitability of the technology to be managed on individual level.
- Its contribution in:
    - Reducing environmental degradation which would have emanated through tree cutting,
    - Conserving energy,
    - Climate change adaptation,
    - Reducing work burden for women and children from gathering firewood.
    - Reducing health problem of women and girls which would occur in using traditional methods, by using improved alternate energy system instead of dirty energy (fire wood & charcoal) which are a case for air pollution with CO_2 emission.
- Option to develop organic farming system which involves the bi-product one as a row material for another.

Major Activities

- Awareness creation, demonstration and training of beneficiaries and
- Installation of biogas digester.

Expected results

- Increased in community awareness in using environmentally friendly energy saving bio-gas digester,
- Increased adaptation of bio-gas digester and
- Reduced tree cutting and health problems and hence improved climate adaptation.

Indicative budget

A total of 72,920,000 Birr (4,289,412 USD) is required to implement this intermediate result in ten years time.

Detail budget for the installation of one bio-gas digester

No	Item	Unit	Quantity	Unit Price	Total Price	Contribution	
					ETB	Funding partners'	Community
1.	**Earth Work**						
1.1	Site clearing	M2	30	4	120	00	120
1.2	Excavation of digester which is cylindrical in	M3	90	30	2,700	00	2,700

	shape with max. depth of 3m						
1.3	Excavation of out let and in let	M3	15	30	450	00	450
1.4	Excavation of drainage the depth of 50cm width 30cm	M	80	12	960	00	960
1.5	Excavation of pipe depth of 50 width 30cm	M	200	12	2,400	00	2,400
	Subtotal				**6,630**	**00**	**6,630**
2.	**Concrete Work**						
2.1	10cm thick floor slab mass concrete	M3	30	110	3,300	2,310	990
	Subtotal				**3,300**	**2,310**	**990**
3.	**Masonry work**						
3.1	20cm thick basaltic or equivalent hard core	M2	30	58	1,740	1,188	552
3.2	40cm thick masonry work to foundation wall	M2	23	700	16,100	11,270	4,830
3.3	Brick masonry	M2	68	420	30,600	21,420	9180
	Subtotal				**48,440**	**33,878**	**14,562**
4.	**Plastering**						
4.1	Out side plastering with wire mash as rain for cement around the brick	M2	60	72	4,320	3,024	1,296
4.2	In side plastering upper and lower part	M2	60	72	4,320	3,024	1,296
	Subtotal				**8,640**	**6,048**	**2,592**
5.	**Painting**						
5.1	Painting wax and oil inside of the done	M3	60	18	1,080	756	324
6.	**Back filling soil leveling and cart away**				00	00	00
6.1	The dug out soil is back fill after external plastering and will be leveled to the shape of the landscape	M3	140	18	2,520	00	2,520
	Subtotal				**3,600**	**756**	**2,844**
7.	**Pipe work**						

7.1	Gas gage	No.	1	720	720	720	00
7.2	Connecting the bio gas plant with the kitchen with GIP pipe including the cost of the GIP that plastic hose to be used at the end points ¾"	M	200	25	5,000	3,500	1,500
7.2	Gas stove	No.	2	500	1,000	1,000	00
	Subtotal				**6,720**	**5,220**	**1,500**
8.	Drainage work						
8.1	In late line from the animal stay to bio gas ø30	M	4	72	288	288	00
8.2	In late line form the toilet to the bio gas digester ø 20	M	80	60	4,800	3,460	1,340
8.3	Out late after the over flow ø 20	M	10	60	600	600	00
8.4	Out late form the digester up to the over flow ø 60	M	12	120	1,440	1,440	00
	Sub Total				**7,128**	**5,688**	**1,340**
	TOTAL				**84,458**	**54,000**	**30,458**

NB: A total of Birr 54,000,000 (3,176,471 USD) is required from funding partners for at least 1000 sites in ten years.

ESTIMATED COST OF 10 FARMERS TRAINING ON BIOFARM TECHNOLOGY SYSTEM AT ONE SITE

No	Activities	Mode of Calculation	Contributions		Total
			Donor	Community	
1	Resource Persons				
1.1	Perdiem	4 persons *Birr2,500	10,000	00	10,000
1.2	Travel Expenses	(Fuel, lubricant, maintenance etc.)	5,000	00	5,000
2	Trainees				

2.1	Perdiem and Transport for the participants	Birr 50*5*10	2,500	1,500	4,000
3	Stationery materials	Birr 42*10	1,420	00	1,420
	Total		**18,920**	**1,500**	**20,420**

NB: A total of Birr 18,920,000 (1,112,941 USD) is required from funding partners for at least 1000 sites in ten years

Implementation Strategy for Specific objective 1

Given the opportunities which involve experiences, lessons learned, organizational structures and policy framework, the challenges in the areas of food security and climate change will be tackled through a community-based participatory watershed and forest management and befit sharing mechanism.

The implementation of sustainable land management will be carried out by establishing sustainable land management to reduce land degradation, reduce vulnerability to shock and build resilience of the farming community.

The impact of implementing watershed management lies in the improvement of natural resources and living conditions of the rural farming community. Concern about possibilities for future generations to meet their needs and to maintain the livelihood system for the existing population depends on the management and use of the natural resources on a sustainable manner under the prevailing conditions.

Since farmers are the managers of the natural resources and ultimate decision-makers on their farming systems, they are also at the for front in facing the consequences declining natural resources and climate change, the planning, implementation, monitoring and evaluation of the project will be carried out in a participatory and watershed management approach by involving farmers, local government, CBOs and other development practitioners.

Specific Objective 2. Clergy & monastic community capacity building training on environment & climate change.

Description and Problems statement

The Church's network has direct access to approximately 40 million Orthodox Ethiopians through more than 500,000 clergy throughout the country. It is relevant to note that in each local parish there are at least five priests serving the parish and in towns there may be as many as 30 priests and deacons serving in one parish.

The clergy are highly integrated within the community, their moral integrity and influence among the laity is immense giving them a unique status within Ethiopian society. This helps to orientate the spiritual, social and apostolic services of the churches in a holistic manner. However, many of the clergy lack appropriate training to face the challenges of environmental conservation, climate change, mitigation and

adaptation. Their training is mainly traditional and not orientated to coping with the current environmental issues.

Consequently, the EOC is eager to upgrade the clergys' & monastic communities' understanding of environmental conservation, climate change, mitigation by giving them appropriate conceptual – practical and theological training to enable them render efficient multidisciplinary services to their constituencies. The basic aim of clergy training is to empower the clergy through transformation of knowledge and skill to promote an efficient implementation of developmental activities alongside with pastoral services. Furthermore, the training will help clergy to play a more effective role in promoting parish church leadership, empowerment of the parish churches for self-reliance and reduction of poverty.

Experience has shown that clergy & monastic community training plays a major functional role in the realization of spiritual and temporal development goals. Moreover, it has been shown that the clergy training has the potential to bring about meaningful change in both rural and urban communities. Taking this into account, the Ethiopian Orthodox Church Patriarchate has established 15 new training centers in 2007, in addition to the existing 7 centers found at diocesan level. This makes a total of 22 clergy training centers through-out the country, whereby each center is expected to give service for at least 2 or 3 adjacent dioceses. On the other hand, the newly established training centers do not have access to hydroelectric power at least for light.

Through the implementation of HIV and AIDS prevention and control and immunization projects of EOC-DICAC, religious leader demonstrated their capacity to be a role model and agents of change in mobilizing the community.

Given its role for the development of the country, all efforts should be made to introduce education on how to care the environment – practical and theological aspects into the curriculum/manual of clergy training centers, training of 7700 clergy & monastic communities on environment and climate change, mitigation & adaptation and
And installation of solar energy in 15 clergy centers.

Rationale

The overall findings revealed that the clergy training programs play a pivotal role and have potential to address critical issues such as poverty, socio-economic development by mobilizing communities. The inherent values and potentialities contained in the teachings and approaches could be of powerful tools and promising area of intervention in order to efficiently address developmental issues along with arming the followers with religious values that shape and qualify citizens to stand for the community improvements and build confidence in self-reliance.

If nurtured, capacitated and effectively managed clergy training centers, can produce qualified and responsible clergies than ever before.

As realized through observation, the upgrading conceptual – practical-theological understanding of environmental conservation, climate change, mitigation and adaptation is of paramount importance. Moreover, the need to for updating the training manuals by incorporating current environmental issues is vital. Furthermore, the newly established clergy training centers lack standard have no access to hydroelectric power or alternative energy at least for light.

Considering the aforementioned background, clergy & monastic communities need to be trained on environmental issues through well designed curricula and the newly established training centers shall have access to alternative solar energy for lighting. It is strongly believed that by fulfilling these requirements it would be possible to address climate change through trained clergy.

Action points

- To capacitate and strengthen the clergies & monastic communities developmental skill so that all of them engaged in fostering environmental conservation as part of socio-economic development by the end of 2016.
- Strengthen operational capacity of churches & clergies for improved participation of the church followers in community development efforts and
- Enhanced community development through clergy mobilization and collaborative efforts.

Major Activity

In order to address the above mentioned problems the following activities are proposed.

- Introduce education on how to care the environment – practical and theological aspects into the curriculum/manual of clergy training centers
- Training of 7700 clergy & monastic communities on environment and climate change, mitigation & adaptation and
- Installation of solar energy in 15 clergy centers.

Expected Results

The following are expected outcomes of the project activities

- Conceptual-practical-theological aspects of environmental conservation included into the clergy training curricula
- Clergy monastic communities improved understanding on environment and climate change mitigation & adaptation and
- Solar energy equipments installation in all 15 clergy training centers.

Number of beneficiaries

A total of 35 clergy are expected to be trained in each training center every year, which makes a total of 7700 clergymen trained in 22 training centers in ten years. The fact is that these clergy are expected to serve their respective parishes as change agents for environmental conservation development. A total of 40,000,000 followers will benefit in ten years.

Implementation Strategy

To ensure sustainability, this program will be implemented with genuine and active participation of communities, sector offices and the respective dioceses office. Major stakeholders will participate in

decision making process, planning, implementing, monitoring and evaluation. This will ensure ownership to manage and replicate their development outputs.

The respective Diocese Offices, the local community, sector offices and EOC-DICAC are the major stakeholders of this project. Each of them will have defined roles and be responsibilities to which they are account for. In this regard, EOC-DICAC will be implementing agency of the project. The local community sector and dioceses offices will fully participate throughout the project cycle phases /stages. The diocese and the monastery community will facilitate the operation and get ready to uptake the project output to ensure sustainability.

Indicative Budget

A total of Birr 8,390,000.00 (USD 493,529) is required to execute this specific objective.

Budget summary for clergy & monastic community capacity building training on environment & climate change

Ser. No	Activity	Budget in Birr	Budget in USD
1	Introduce education on how to care the environment – practical and theological aspects into the curriculum/manual of clergy training centers	30,000.00	1,765
	Training of clergy on environment and climate change, mitigation & adaptation	7,700,000.00	452,941
	Installation of solar energy in 15 clergy training centers	660,000.00	38,823
	Total	**8,390,000.00**	**493,529**

Specific Objective 3: Social and Infrastructural Development of Monastic Institutions Improved.

Description and problem statement

Many monasteries have young members who are active in attempts to increase their resources and potential. Many have implemented agricultural and other income generating projects, which have been to some extent successful. However, they often face hurdles due to lack of infrastructure, in particular lack of roads which permit them to take their agricultural produce to markets and access to agricultural extension. Access to social service will also be hampered due to the lack access road. Moreover, the lack

of access road prevents visit of pilgrims at major festivals, who could constitute a source of potential extra revenue and partnership in development projects.

It is very noticeable that monasteries in accessible places (such as Sabatha Beta Denegal just outside Addis Ababa) have been much more successful in promoting development initiatives.

In the vicinity of some monasteries there has been degradation of the natural resources, because of tree cutting and other activities. This is often linked to a lack of light and energy. Most monasteries and nunneries do have access to safe water for human and livestock.

The construction of access roads and other infra-structure and social facilities are indispensible aids to monastic development. Another important area of infra-structure development concerns the stewardship of water resources, in particular creating access to potable water.

Rationale

The provision of access roads contributes much to making monasteries self-supporting. Firstly it enables them to market their produce and obtain any required extra produce for the monastery. Secondly it facilitates that visitors come to visit the monastery, especially on festivals when their offerings and donations make an important contribution to the economy of monastic communities. The more visitors there are the more likelihood there is of developing a network of benefactors who can contribute to the development of the monastic community. Thirdly, access road facilitates the provision of agricultural extension and access to health and education for the target community.

The availability of clean fresh water, light and energy through installation of solar energy equipments for the domestic use of monastic communities, is also very important to monastic well-being. While promoting the use of solar energy it will be possible to simultaneously address and mitigate the pressure on forest remnants.

Action Points:

1. To create access to various social infrastructures such as market, health, education and
2. To reduce water borne diseases, workload and save time for other household and economic activities and
3. To create access to environmental & health friendly light and energy sources

Major activities:

- To construct access road for the monastic and adjacent areas
- To construct access road for the monastic and adjacent areas and
- Install solar energy equipments

Expected results

- Access to market, health, education improved
- The problem of water borne diseases reduced, workload of women & children and monastic community reduced and the time saved from fetching water be used household and economic activities
- Environmentally & health friendly light and energy uses enhanced

Number of beneficiaries

A total of 47,200 beneficiaries (20,000, 24,200 and 3,000 from access road, water supply and solar energy respectively) will benefit from this project.

Location

It is proposed to construct 12 km access road to Asebot Monastery in west Hararge of Oromiya region. Two bare halls constructions in Jijiga and Mahbere Silassie (N. Gondar), nine spring development (3 in Oromiya, 2 in Tigray and 4 (including Amare Birhan Monastery) in Amhara), six roof water harvesting structure constructions (3 in Tigray, 2 in Amhara and 1 (Menagesha Medhanialem) in Oromiya) will be carried out to create access to safe water in six regions. Fifty miniseries will get access for solar energy equipment.

Implementation strategy

To prepare the project proposal, further verification of detail activities and community contribution will be conducted with the participation of intended beneficiaries and other major stakeholders. Moreover, design, specification and bill of quantities of each activity will be prepared following stakeholders discussion and verification of activities. EOC-DICAC will carry out alignment demarcation of sites and execute activities as soon as the budget is secured from donors.

Indicative Budget

A total of Birr 15,380,000 (USD 904,705.88) is required to execute this specific objective.

Budget summary for social infrastructures

Ser. No	Activity	Budget in Birr	Budget in USD
1	Access road construction	**3,000,000**	**90,909**
2	Potable water supply		
	4 Bore halls with distribution points	11,000,000	333,333
	18 Spring development	1,080,000	63529

	12 Roof water harvesting structures	1800000	105,882
	Water sub total	**13,880,000**	**502,744**
3	Installation of Solar energy equipment	**1,500,000**	**88,235**
	Total for social infrastructure	**15,380,000**	**904,705.88**

6.Budget Summary of the project (all specific objectives)

Category	**TOTAL**
1. COMMON COSTS	
PERSONNEL	$ 500,000
FRINGE BENEFITS AND ALLOWANCES	$ 60,000
TRAVEL	$ 150,000
EQUIPMENT	$ 80,000
SUPPLIES	$ 142,000
OTHER	$ 40,000
SUBTOTAL (1)	$ 970,000
2. TOTAL DIRECT CHARGES	$ 47,459,226
3. INDIRECT CHARGES	$ 4,745,923
4. TOTAL FUNDING PARTNERS CONTRIBUTION (1-4)	$ 52,205,148

7.Monitoring and Evaluation

There will be a comprehensive monitoring and evaluation system developed as an integral part of the project design of which overall objective is to review progress against planned activities and to assess the achievement of objectives of the project.

follow up the day –to-day activities through conducting regular visit and project team located at the head office of EOC - DICAC jointly with the regional and woreda level culture and tourism office bureaus. During the monitoring process, different type of monitoring formats is utilized to collect data. Mid – term evaluation of the project will be carried out by the team of which members to be drawn from the applicant and implementing partners and the key stakeholder s including targeted beneficiaries at the middle of the implementation period.

8. Organization and Management

The project team is organized at national level whose office will be in Addis, with a mandate of organizing, coordinating and controlling of the overall activities of the project to be undertaken in all of the ten targeted monasteries. EOC – DICAC is responsible to provide the team with office, required facilities and manpower who will assist in technical and management support. The project team will have permanent staffs including project manager, administrating and finance officer culture and M & E experts. The project team will be accountable to the Development Department, but will be consulted by a technical committee.