

INTERNATIONAL TROPICAL TIMBER ORGANIZATION (ITTO)

REDUCING DEFORESTATION AND FOREST DEGRADATION AND ENHANCING ENVIRONMENTAL SERVICES IN TROPICAL FORESTS (REDDES)

PROJECT DOCUMENT

TITLE	ADVANCING REDD+ IN GHANA: PREPARATION OF REDD+ PILOT SCHEMES IN OFF-RESERVE FORESTS AND AGRO-FORESTS
SERIAL NUMBER	RED-PD 093/12 Rev.3 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF GHANA
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SUMMARY

The present REDDES project is preparing a major support component to Ghana's Readiness Preparation Proposal (RPP) and aims at strengthening Ghana's capacities to prevent and reduce deforestation and forest degradation and enhancing carbon stocks (REDD+). The specific objective of the REDDES project is to lay out the ground work for the development or enhancement of off-reserve production systems under REDD+ schemes, in line with its efforts to reduce GHG emissions in forests.

The present REDDES project is a preparatory step for an additional support component for the implementation of Ghana's R-PP and is mainly concerned with developing a number of analytical work and the definition of REDD+ pilots in off-reserve areas. The project is also aimed at developing a framework to guide the implementation of REDD+ from the national to the local level. This shall allow Ghana to take stock of existing initiatives that have the potential to be considered under REDD+, as well as to concretely analyze promising REDD+ activities, which will be an integral part of the RPP. The information produced through the REDDES project shall prepare the further implementation of agricultural and secondary forest production schemes that feature climate smart practices.

EXECUTING AGENCY GHANAIAN NATIONAL REDD+ SECRETARIAT

COOPERATING AGENCIES FOREST RESEARCH INSTITUTE OF GHANA (FORIG) AND SCHOOL OF AGRICULTURAL, FOREST AND FOOD SCIENCES OF THE BERN UNIVERSITY OF APPLIED SCIENCES (HAFL)

DURATION 12 MONTHS

APPROXIMATE STARTING DATE TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE	Source	Contribution in US\$	Local Currency Equivalent
	ITTO	297,205	
	Gov't of Ghana	69,749	
	TOTAL	366,954	

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LIST OF ABBREVIATIONS

DD	-	Deforestation and Degradation
DSA	-	Daily Subsistence Allowance
FC	-	Forestry Commission
FSD	-	Forest Services Division
FAO	-	Food and Agricultural Organisation
FCPF	-	Forest Carbon Partnership Facility
FIP	-	Ghana – Forest Investment Program Plan (by MLNR)
FORIG	-	Forestry Research Institute of Ghana
FORUM	-	Forest Protection and Resource Use Management Project
FPRI	-	Forest Products Research Institute
GHG	-	Green House Gas
GoG	-	Government of Ghana
GPRSP	-	Ghana Poverty Reduction Strategy Project
HFZ	-	High Forest Zones
IUCN	-	International Union of Conservation of Nature
ITTO	-	International Tropical Timber Organization
KNUST	-	Kwame Nkrumah University of Science and Technology
NAMA	-	Nationally Appropriate Mitigation Action
NRWG	-	National REDD+ Working Group
NTFPs	-	Non-Timber Forest Products
PADP	-	Protected Area Development Programme
PRA	-	Participatory Rural Appraisal
REDD	-	Reduction of Emission from Deforestation and Degradation
REDDES	-	Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests
R-PP	-	REDD Readiness Preparation Proposal
SECO	-	Swiss State Secretariat of Economics
SFM	-	Sustainable Forest Management
UNFCCC	-	United Nations Framework Convention on Climate Change
VPA	-	Voluntary Partnership Agreement (with EU)

1 PART 1: PROJECT CONTEXT

1.1 ORIGIN

The principal drivers of deforestation and degradation as identified in the R-PP are agricultural expansion (50%); Wood harvesting (35%); Urban sprawl and infrastructure development (10%); and Mining and mineral exploitation (5%). The RPP identified 14 potential REDD+ strategic actions, including the mitigation of agricultural expansion, reduction of unsustainable timber harvesting and clarification of tenure and rights regime. Ghana considers REDD+ as a win-win strategy which reduces global greenhouse gas emissions through the reduction of inappropriate forest conversion and degradation which leads to positive co-benefits like poverty alleviation and biodiversity conservation. In order to be successful, REDD+ needs to target the underlying drivers of deforestation and forest degradation which interact in a complex structure. FCPF has already provided funds to support the implementation of the REDD+ strategic actions. On the other hand SECO and FIP have committed funds to support the operationalisation of the Strategic Actions pending the submission and approval of Investment Plans and Project Proposals. The stakeholder consultation processes for these projects have identified the need for in-depth analysis in order to develop the perceived best strategy and the associated challenges and risks for implementing the REDD+ strategic actions. Addressing such challenges, Ghana engaged in some of the major international processes to develop its readiness for REDD+ at national level. First of all, the strength of the current ITTO project is that it lays the foundation for the effective utilization of the three main funding sources for the implementation of the R-PP. Secondly, the present project also complements the structured effort of the Ghana Government and its development partners in implementing the **Readiness Preparation Process**. This process has been outlined in the Readiness Preparation Proposal (RPP) that has been approved by the Participants Committee of the Forest Carbon Partnership Facility (FCPF) during its fifth meeting held in Gabon in March 2010. Its conclusion was to move ahead with the preparation for REDD+¹ readiness in three steps: 1. analysis and preparation, 2. pilot project implementation, 3. technical preparation for readiness for REDD+. The major objective in the R-PP implementation phase is to build substantial technical and institutional capacity that is essential for Ghana to fully participate in the REDD+ mechanisms, which requires new legislations as well as new political and institutional approaches on a cross sectoral level. Thirdly, the present REDDES project is focused on one main element of the RPP that develops on off-reserve forests, agroforests and other carbon conservation activities that have the potential to become a pillar of Ghana's REDD+ strategy. As such the REDDES project contributes to the development and/or enhancement of sustainable off-reserve production systems, so that Ghana will be able to benefit from future carbon trading schemes. In preparing the implementation arrangements of the RPP, a number of gaps have been identified that need to be addressed through an additional support element in order to achieve REDD readiness. This includes options for benefit sharing schemes, long-term forest resources assessment and dynamics, forestry economics and scenario analysis as well as a description of the mechanism for the selection of REDD+ pilot projects.

Due to a longstanding and trustworthy cooperation between Ghana and Switzerland, not the least in the ITTO and FCPF, it was proposed to formulate a project through ITTO to undertake a number of analytical studies and to prepare a main support project to the RPP. For this purpose, a partnership arrangement has been formed between Ghanaian and Swiss institutions in advancing REDD+ in Ghana through a REDDES project proposal, including the Forestry Research Institute of Ghana (FORIG), the REDD+ Working Group in Ghana and the Bern University of Applied Sciences. The project intends to undertake selected studies so that in the main phase of supporting -RPP implementation, adequate pilot activities as proposed in the REDD+ strategy can be carried out. Also, it is expected that the project, will be able to inform authorities regarding adequate policies for the REDD+ arrangements. Such results from Ghana in off-reserve forest areas are of

¹ REDD+: In the Bali Action Plan, §70, developing countries are encouraged to “contribute to mitigation actions in the forest sector” through reducing emissions from deforestation, reducing emissions from forest degradation, conserving forest carbon stocks, enhancing sustainable management of forests and enhancing forest carbon stocks (from the COP16 agreement on REDD+, official UNFCCC text).

wider interest to ITTO member countries. Outreaching the approach and results of the current project to other ITTO countries is thus an important rationale of the present proposal.

1.2 RELEVANCE

1.2.1 Relevance to the submitting country's policies

Acknowledging the fact that deforestation and forest degradation is a major socio-economic and environmental problem generating high costs to the country, as well as taking into account the international developments going on in the forest sector, Ghana has prioritized the work on climate change actions nationally and internationally. While social and economic development and poverty eradication are the highest priority of the countries' policies, it has also recognized that "low emission development strategies are indispensable to sustainable development"², not the least because the economy heavily depends on climate-sensitive sectors such as agriculture, forestry and water resources. The country therefore hosts various programmes co-funded by international donors in the area and takes serious efforts to mitigate forest-related climate change challenges. The political will thus existing, there is a need to address inadequate technical capacity as well as policies and institutional constraints in order to practically benefit from new opportunities to integrate Ghana's forests into the wider global GHG-mitigation scheme.

Reducing Emissions from Deforestation and Forest Degradation (REDD) is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. Ghana has integrated the REDD+ Readiness Process as a main governmental strategy (see also below regarding NAMA), which recognizes the following:

- the need to identify threatened forests to pilot REDD activities,
- the need to design a credible monitoring and verification system for land use change related emissions,
- that reliable baseline and robust monitoring approaches are essential for advancing REDD in Ghana ,
- the need to account for CO₂ emissions and removals due to changes in carbon stocks on timely basis,
- that REDD for Ghana requires capacity building along with demonstration activities, institutional arrangements, benefit sharing arrangements, clarification of carbon rights, etc.,
- the use of GIS for archiving and analyzing data coming from land-uses and carbon stocks, and
- that REDD would proactively support SFM, forest law enforcement and governance and ensure forest protection.

Thematically, Ghana has defined two broad and overlapping areas for REDD+:

- **Timber policy and supply:** Focus on traditional forest and timber sector operations, processes, policies and laws, and on the potential for broadening public participation in the sector and its management. This will involve consideration of both, supply from forests (on-reserve) and trees outside forests (off-reserve), and the potential of REDD+ payments to improve the management and emissions performance of each.
- **Wider aspects of forest and land policy:** Approaches here will reflect the emission reduction potential for action in the agriculture, agro-industry and fuel wood sub-sectors to contribute to reduce deforestation and degradation.

The herewith proposed project thus focuses specifically on dealing with open questions regarding REDD+ implementation. Components of REDDES are the development of concepts involving sustainable agroforests supply chains in REDD+, assessing charcoal production and fuel wood trade as a potential area for REDD+ development, assessing low carbon development in agro-

² http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/ghana_namas.pdf

industries where they could be a strategy to reduce deforestation and degradation, as well as benefit sharing mechanisms in view of the implementation of REDD+.

Ghana's Forest Policy is mainly based on the Forest and Wildlife Policy of 1994³. A new draft Forest and Wildlife Policy was submitted this year to the Cabinet of the Government of Ghana for approval. The draft Forest and Wildlife Policy addresses issues such as forest and savanna ecosystem management; rehabilitation and restoration of degraded landscapes; and development of viable forest and wildlife-based industries. The draft forest and wildlife policy also addresses global challenges such as chain of custody, including the Voluntary Partnership Agreement (VPA), Forest Certification and REDD which have far reaching implications for forest and wildlife industry as well the local livelihoods. Other cross-cutting issues such as forestry financing, gender and collaborative forest management are addressed by the draft policy.

It is worth noting that the preparation of the R-PP was done in tandem with the development of the draft Forest and wildlife policy. The draft forest and wildlife policy provides the broad framework for the implementation of the R-PP. In addition, both documents emphasize that the forest and wildlife sector will have to find new ways to halt, and reverse the pace of deforestation and forest degradation in Ghana. Both documents also lay the broad framework for the effective management and protection of both the remaining permanent estate of forest and wildlife reserves within and outside forest reserves. The documents also emphasize the social, cultural, ecological and economic management of natural resources in the country.

Taking the more specific frameworks above into account, the project is in line with Ghana's National Appropriate Mitigation Actions (NAMA), defined in 2010 according to the Bali Roadmap as a submission to UNFCCC. Ghana mentions land use, land-use change and forestry (LULUCF) as one focus of the NAMA⁴. Within the LULUCF sector, Ghana wants to tackle the high decline in natural forest estates (land conversions) and the low rate of rehabilitation of degraded forest lands. Several strategies are listed in the NAMA to address these problems, among them the promotion of sustainable forest management as well as the implementation of REDD+. This proposal is therefore perfectly in line with Ghana's internal policies, as it is defining concrete measures how to implement the NAMA, which are the broader guiding framework on the policy level.

In addition, the proposal is relevant to the **Ghana Poverty Reduction Strategy Programme** (GPRSP). The GPRSP document emphasizes the need to:

- Protect, rehabilitate and sustainably manage the national land, forest and wildlife resources through collaborative management and aimed at increasing the incomes of rural communities who own these resources.
- Enhanced community involvement in the management of forest and wildlife and savannah woodland resources and improve the benefit flows to communities from resource sales.

Furthermore, the R-PP is consistent with Ghana's **Strategic Growth and Development Agenda** (GSGDA) 2010 – 2013, which includes a focus on strengthening carbon conservation techniques as well as on the needs of society and human-centred biodiversity conservation initiatives.

The present REDDES project, as a preparation phase of a main Ghanaian-Swiss project supported by SECO project, will therefore focus on a basis to work out viable off-reserve and agroforests production schemes that could combine poverty alleviation and low carbon strategies and finally create opportunities for additional income through the optimisation of production schemes including carbon certificates.

³ Other policy instruments like the Timber Resource Management Act can be found in fcghana.com (publications).

⁴ Besides Land Use, Land-Use Change and Forestry, the NAMA from Ghana include the following sectors: energy (electricity, transport, residential, industrial, liquid and gaseous fuels), industrial processes (metal production), agriculture (crop production), and waste (solid waste disposal and waste water handling). Several proposed measures overlap with forestry-themes, such as the problem of wood fuel, unsustainable harvesting of wood or uncontrolled burning.

1.2.2 The project's conformity with ITTO objectives and priorities

The project is in conformity with the ITTO objectives clauses⁵ c, f, j, l and m. It is also in agreement with the ITTA 2006, as shortly outlined in the following.

(c) To contribute to the process of sustainable development.	<i>The activities of the project are all geared to support Ghana in the preparation of low-carbon development strategies, focusing on approaches that provide alternatives to deforestation and degradation of forest areas.</i>
(f) To promote and support research and development with a view to improving forest management and efficiency of wood utilization as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests.	<i>Commercial crops issued from agroforestry systems such as cocoa, Allanblackia and cashew will be the focus of analytical work in order to develop sustainable production systems; in the 1st phase background work will be carried out to define the pilots that will be carried out in the 2nd phase.</i>
(j) To encourage members to support and develop industrial tropical timber reforestation and forest management activities as well as rehabilitation of degraded forest land, with due regard for the interests of local communities dependent on forest resources.	<i>Output 2 of the project is to identify mechanisms in management and governance of forests and trees in order to enhance the sustainability of forest management.</i>
(l) To encourage members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and their genetic resources and at maintaining the ecological balance in the regions concerned, in the context of tropical timber trade.	<i>Selected non-timber forest products as well as wood products including plant production will be analysed in view of the inclusion of pilots in the REDD+ strategy to inform the policy level on sustainable options in forest and tree management.</i>
(m) To promote the access to, and transfer of, technologies and technical cooperation to implement the objectives of this Agreement, including on concessional and preferential terms and conditions.	<i>Through the cooperation between local scientist and Swiss scientists, resources and experiences will be pooled for a useful technical cooperation.</i>

In addition, this project is in line with ITTA objectives of 2006, calling for actions of the ITTO to “Promoting better understanding of the contribution of non-timber forest products and environmental services to the sustainable management of tropical forests with the aim of enhancing the capacity of members to develop strategies to strengthen such contributions in the context of sustainable forest management”. The project bundles a number of analysis aiming at enhancing capacities in Ghana in the sustainable management of forests, as well as in their management and governance.

The ITTA 2006 Agreement also calls members to contribute with financial resources necessary to achieve the objectives of the Agreement.

1.2.3 The project's synergies with the national ITTO programme

The proposed project will be implemented under the framework of the International Tropical Timber Organisation's (ITTO) thematic programme “Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests” (REDDES). The programme aims at improving “livelihoods by reducing deforestation and forest degradation and enhancing environmental services through the sustainable management of tropical forests, forest restoration, afforestation, reforestation and other related activities”. Its objective is to address climate change effects while enhancing possibilities for long-term socio-economic benefits of forest dwellers, as poverty often is an underlying cause of deforestation. This frequently results in a

⁵ http://www.itto.int/about_itto_detail/

reduction of the quality and quantity of forest environmental services (like carbon sequestration, regulation of the water cycle, conservation of biodiversity, etc.). REDDES therefore seeks to reduce deforestation and forest degradation through the expansion of sustainably managed areas which also includes restoration of degraded secondary forests and rehabilitation of degraded forest lands, thereby complementing other international initiatives as REDD. **The priorities of the thematic programme are I. Assessment and diagnosis, II. Enabling conditions and Capacity Building, III. Demonstration activities and IV. Scaling up and dissemination. The present project would focus mainly on priorities I and III by closing gaps through analytical works and preparing the basis for the implementation of pilot projects with the goal to introduce low-carbon development schemes.**

The ultimate target groups of the programme are forest communities and indigenous groups as well as formal forest owners and managers. Furthermore, the civil society organizations, knowledge institutions, policy makers, government agencies, relevant private organizations, and other forest stakeholders should benefit from capacity building, demonstration activities or dissemination of diagnosis results. In addition to environmental benefits, the programme's expected socio-economic impacts include new opportunities for the private sector through sustainable forest management. In addition, the Government of Ghana (as a selected country for REDDES) will benefit in gaining information for policy decisions and strengthening its capacity in avoiding unplanned deforestation. Synergies with this project will therefore develop on all levels of other ITTO interventions.

1.2.4 The project's synergies with the FCPF R-PP

This project is designed to complement activities under the Forest Carbon Partnership Facility (FCPF). Under this multi-donor trust fund, the national REDD+ scheme has been developed and approved. The **REDD Readiness Preparation Proposal (R-PP)**, states the following as its goal and purpose:

- Goal: To achieve collective ownership of the process to develop strategies that reduce emissions through deforestation and degradation (REDD) and to support conservation, sustainable forest management, and the enhancement of forest carbon stocks (the + in REDD plus).
- Purpose: To ensure that all stakeholder groups have a better understanding of REDD plus, how it relates to Ghana and what roles, responsibilities and opportunities they have within Ghana's efforts.

Furthermore, in preparation of the RPP it was concluded that several activities will be undertaken in order to strengthen ownership across government agencies, sectors and stakeholders (namely traditional owners and local communities), strengthen the consultation and participation process as well as focusing more on multi- and cross-sectoral issues. In this project, these developments will be taken into account, and a particular focus will lay on capacity building and knowledge sharing.

1.2.5 Other synergies

There are some interesting synergies that were not mentioned in the proposal (e.g. the ongoing activities with the UN-REDD, after its Board has agreed last December to Ghana's request to participate in the UN-REDD program or the SECO funded activities in organic cocoa)

The Forest Investment Program (FIP), administered by development banks including the World Bank, has in a recent decision allocated substantial resources to Ghana. REDDES will add important elements for the REDD+ preparation of Ghana, whereas the FIP will take the part of up-scaling the measures defined. Recently, the Ministry of Lands and Natural Resources (MLNR) has published the Ghana Forest Investment Program (FIP) Plan, that gives an overview on the state of forests in Ghana as well as the various initiatives that exist in addition to the above mentioned REDD+ Project, co-funded by multi- and bilateral donors:

- Natural Resources & Environmental Governance Programme (NREG)
- Non Legally Binding Instrument on all Types of Forests (NLBI)
- Forest Preservation Project, FPP
- Land Administrative Project, LAP

- Community Forestry Management Project

In addition, the UN-REDD Board invited Ghana in November 2011 as a new partner country in the UN-REDD program. Besides participating in the online community of practice of the UN-REDD Global Programme, Ghana therefore also has observer status at policy meetings and has the possibility to file a National Programme.

As whether the status as a UN-REDD partner country nor the FCPF funding for the REDD+ process allow for financing national piloting activities, the here proposed project allows to cover an important gap for the advancement of REDD+ in Ghana.

Other programmes that need to be taken into account comprise:

The National Action Programme to Combat Desertification and Drought (where one approach is to promote dryland forestry, agro forestry and community fuelwood plantations)

The Green Africa Initiative, launched by the Government of Japan, which seeks to address desertification and land degradation issues in the dry and degraded areas of Africa, including Ghana. The Green Ghana Initiative (GGI) is under the overall framework of the Green Africa Initiative. The Team is currently developing the Project Document for Co-Funding by the African Development Bank (AfDB) and the Japanese Government. The Ministry of Lands and Natural Resources (MLNR) is the implementing body.

The forest fire management project supported by the International Tropical Timber Organisation (ITTO), Japan and jointly implemented by Forestry Research Institute of Ghana (FORIG), Forestry Commission (FC), Ghana, United States Department of Agriculture – Forest Service (USDAFS), and Ghana National Fire Service (GNFS) was aimed at collecting baseline data for use by forest managers and policy makers. The specific objective was to reduce rates of natural forest depletion by developing efficient fire management systems. This was against the background that fire had become the single most important threat to the productive capacity of most forest reserves especially those in the dry and Semi-deciduous forest zones resulting in annual loss of 3% of GDP. The project developed effective forest fire control systems; and operationalised effective wildfire prevention education and awareness programmes.

The IUCN and Swiss co-funded (SECO) programme on the development of *Allanblackia* in Ghana, a unique public-private partnership that had been formed to support the development of a new commodity of an edible oil from the seeds of the indigenous '*Allanblackia* tree'. This process includes local communities, non-governmental organisations, donor agencies and a private company and has the potential to serve as a model for developing REDD+ pilots.

Moreover, SECO also co-supports the development and upscaling of the value chain for fair trade organic cocoa. The project was started in 2007 with the goal of providing better income possibilities for small scale farmers while promoting sustainable production and high quality product delivery. As with *Allanblackia*, there is a high potential for the development of REDD+ pilots in this area, considering the potential climate sensitivity of organic and/or fair trade production of cocoa. This question will be part of the analytical works to be done under the current proposal.

1.3 TARGET AREA

Degraded forest areas outside forest reserves (off-reserve) and agricultural land in the forest area and transitional area (see Figure 1) are the broad geographical target of REDDES, as the major part of Ghana's GHG emissions and sequestration potential stem from them. Specific areas will be chosen during the REDDES implementation in order to define areas where a combination of organic crop production and REDD+ implementation appears promising. For example, shaded cocoa combined with crop production is regarded as the land use system with the greatest potential to sequester carbon, while contributing to the sustainable livelihood of a great number of small-holders in rural areas. Through assessing alternatives to traditional agricultural systems

which cause emissions by converting and degrading forests, pathways for “climate smart farming systems” that use REDD+ mechanisms shall be developed.

In the R-PP, Ghana defined its forest as a “canopy cover greater than or equal to 15%, 5 meters tree height, and coverage of at least 1 hectare”. In applying this definition, Ghana’s forests thus cover an area of around 6 million ha. According to the Ghana-Forest Investment Program (FIP)⁶, so far only this area is eligible for REDD+ projects and programs, aiming at meeting expected voluntary market standards. However, the definition of land use types being eligible for REDD+ is not finished yet and may be subject to changes.

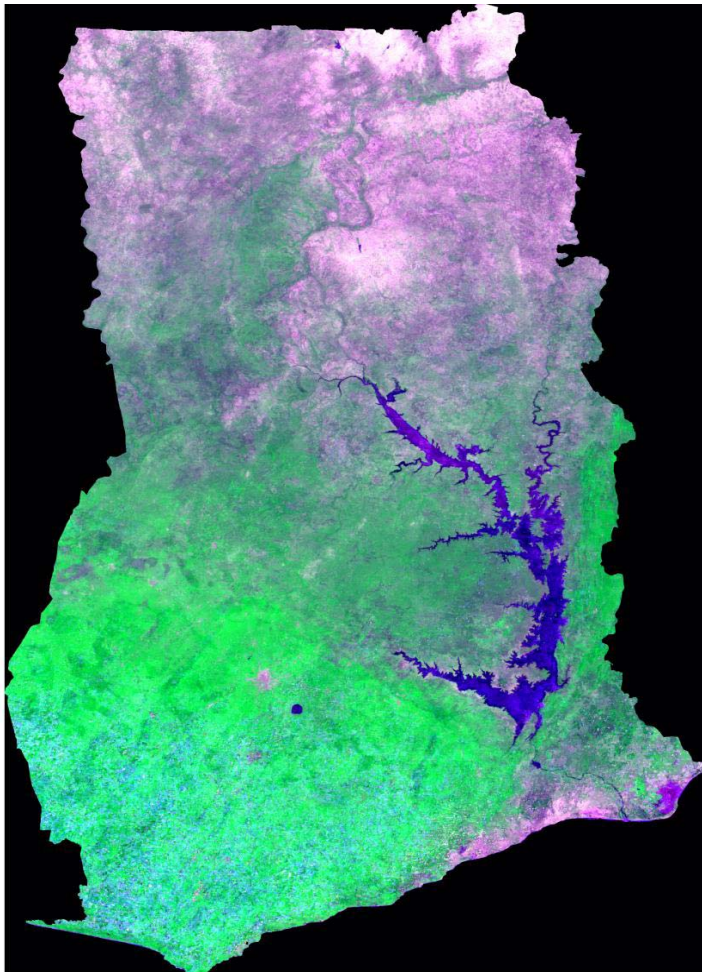


Figure 1: Digital Map of Ghana (from R. Bamfo, “Ghana’s Journey towards Carbon emission reductions”, Carbon Fund Meeting, March 2012, Asunción)

1.3.1 Geographic Location

The work under the REDDES proposal is conducted in Ghana’s high forest area as well as in the transitional area as outlined in Figure 1. For the implementation of the main project, specific areas will be chosen out of the three forest zones classified in Ghana as high forest zone, transitional zone, and savannah zone. Abatement curves predicated on net (discounted REDD benefit only) benefits per tCO₂e sequestered and stored and the total potential CO₂e sequestered, over a 20 year period, indicate that, although biomass density is greater in the high forest zone, opportunities

⁶ Ghana –Forest Investment Program (FIP) Plan, by the Ministry of Lands and Natural Resources (MLNR) of Ghana, draft 19 March 2012 (http://www.fcghana.org/webdocs/programmes/fip%20final%20draft%20V5_March%2019.pdf, 10.4.2012, p. 11-12)

for biome-based carbon sequestration and storage can be found in all regions in Ghana (Figure 2). Nevertheless, the Brong Ahafo, Western and Northern Regions stand out as the geographic area that might yield the largest total benefit in terms of carbon sequestration through landscape restoration (Figure 2). There are also considerable potential co-benefits in these interventions apart from the GHG abatement capacity. Thus specific sites would be chosen in the Northern Region (Savanna Zone), Brong Ahafo Region (Transition Zone) and Western Region (High Forest Zone), which have the potential for the highest carbon and REDD gains (see Fig. 2).

The natural climate in the tropical forest area of Ghana is of high humidity and temperature. Two rainy seasons can be distinguished (April – July and September - November). December and January are the driest periods. August normally is the coldest month of the year. The transitional area, as its name says, lies between tropical continental and wet semi-equatorial climate zones. It also has two peak rainfall seasons (March-June and August – September), although the distinction between the peaks is not as clear as in the tropical area. Humidity and temperature is also high, whereas in the transitional zone temperature peaks can even be more acute than in the tropical zone. The Savanna Zone has one rainy season with the dry season lasting between 5-6 months.

Ghana Landscape Restoration Carbon Abatement Curve by Region

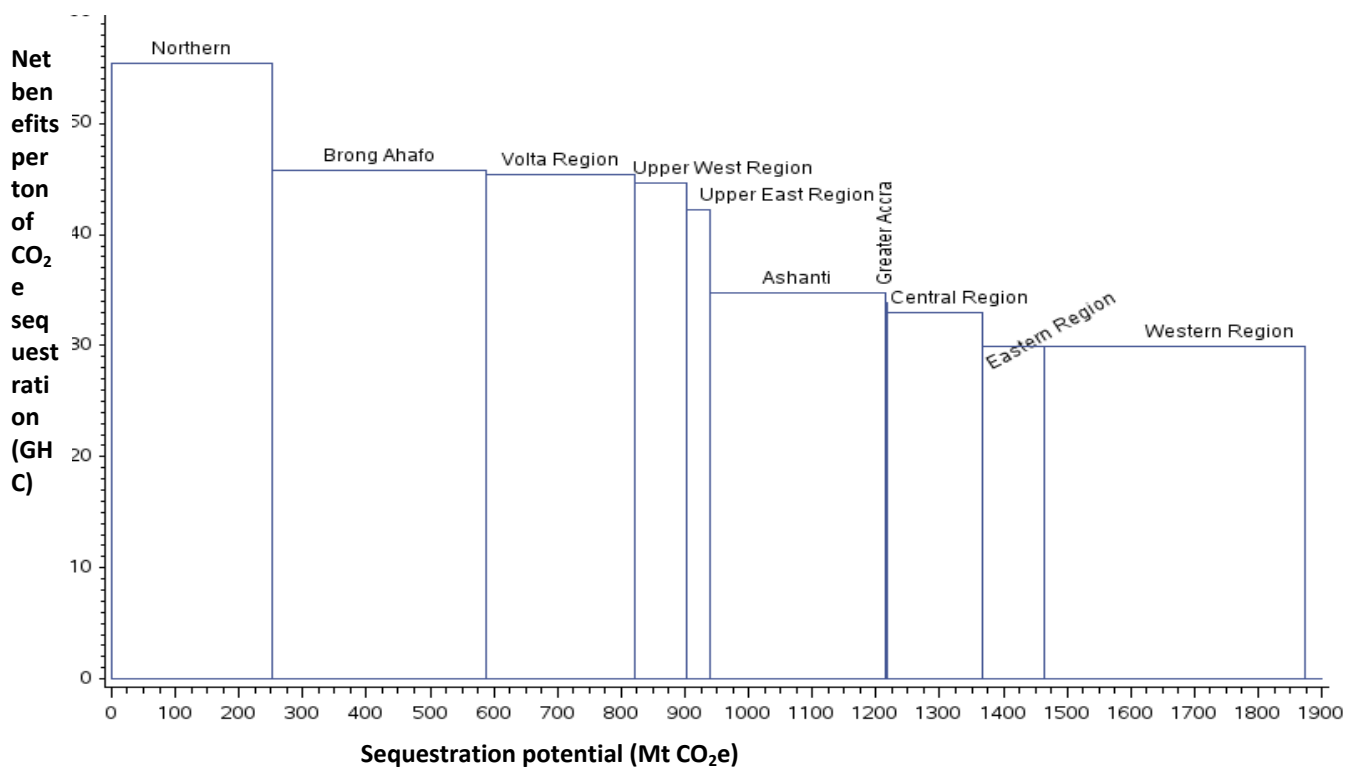


Figure 2: Ghana Landscape Restoration Carbon Abatement Curve by Region (source: IUCN, Ghana, 2012).

As summarized in a World Bank report⁷ about Ghana, climate change has led to changes in rainfall patterns and season's starting and ending times, among other phenomena. This prompts the need to find solutions to the adaption problems caused by climate change **which currently affect livelihoods primarily in the savannah zone. Therefore, in the framework of REDDES, it will be analysed if and/or how far pilots in the savannah zone could be contributing to REDD+ goals.**

1.3.2 Social and cultural aspects

Roughly 2 million people in Ghana depend on forests for their subsistence as well as for maintaining traditional and customary lifestyles and hence for strengthening identity. A report of FERN⁸ estimates that 60% of Ghana's population, (some 12 million. people), depend on forests for making a living. This part of the population suffers the most from the degradation of forests, as it negatively affects the natural resources needed for cultivation (water and soil degradation), as well as the availability of NTFPs for various purposes.

As smallholders' educational and literacy level lies below Ghanaian average, it is also very difficult for them to have a common voice against timber exploitation like illegal chainsaw activities, or to restrain from small gains from own extraction.

In 2009, around 45% of the population was under 18, and Ghana's population is expected to grow at around 2.5% per annum over coming decades. Currently about 50% of the population is urbanised and this is growing at around 4% per annum. Both immigration and emigration have small but significant impacts on demographic issues with around 8% of Ghanaian residents having been born elsewhere and 1.5-3 million Ghanaians living abroad. Remittances from Ghanaians resident overseas are an important source of foreign currency. Internal migration is also significant with a drift of population towards the more developed south of the country.

Gross National Income per capita was around US\$700 in 2009 and government policies aim to increase this to \$3,000 by 2020. Ghana's ambitious economic plans are based on macroeconomic stability, enhancing the competitiveness of Ghana's private sector, agricultural modernisation, sustainable natural resource management, and development of oil and gas resources.

Communal ownership is the main feature of land tenure in most of Ghana. Such land is controlled by lineage or clan based land-owning groups and allocated to individuals or households on a usufruct basis. Those without usufruct rights may also gain access to land through customary sharecropping agreements. Under this traditional system both men and women can access land as long as they are recognized members of the local communities. The national Land Policy published in 1999 stipulates that all traditional sources of land tenure and rights are recognized as legitimate sources of land titles and the law protects such tenure rights. Leaseholds may be granted for a maximum duration of 49 years, renewable. The policy document provides a framework for access to land by all Ghanaian men and women, including internal migrants, as well as foreign potential investors, provided that: a) customary practices governing the disposal of the land, b) the individual agrees to put the land to a use that conforms to the land use plans for the area and to principles of sound land use management⁹. Ghana is notable in that all forest and savannah woodland reserves are owned by the local communities and traditional authorities, and managed by the government in trust for the people. On customary land traditional trees are a feature of the farming systems. Trees are not always transferred together with the land. In principle, families within a given clan retain the right to trees, especially those with economic value, even when the right to the use of the land has changed hands. In other cases, however, clan families may agree with tenants, arrangements for

⁷ <http://climatechange.worldbank.org/sites/default/files/documents/Ghana-EACC-Social.pdf>, 10.4.2012, p. 14

⁸ Forest Governance in Ghana, An NGO perspective. FERN/Forest Watch Ghana, March 2006

⁹ The GoG seeks to secure landrights with the support of WB and other donors:

<http://www.ghanalap.gov.gh/index1.php?linkid=47&sublinkid=97>. Presently, the state of implementation is unclear.

revenue sharing for some of these trees. In forest reserves and other lands, right to naturally occurring timber trees is vested in the state President and in accordance with the Concession Act of 1962, the state is empowered to manage and regulate the use of Vested Lands on behalf of the communities.

Households are often dependent on fuelwood for their daily energy needs. As the population is rapidly growing, this poses a high pressure on the forests and is an important factor to forest degradation. **Another ITTO-Project is working on “efficient charcoal and briquette production” (OD 612/11 Rev.2). This project has the potential of complementing the approach here proposed.**

A further aspect has to be considered regarding forests in Ghana, which is the one of spirituality. Often, a combination of religious beliefs exists among the population, while traditional beliefs and customs can be said to be more vivid in rural areas. Traditional beliefs can be a very strong incentive to protect forests, as has been testified in various cases¹⁰. 59,037 ha of Ghana's forests can be classified as “primarily for social services”, as the FAO Forestry Assessment 2010 puts it.

Within the present REDDES project, the study of the potential effects of REDD+ implementation on local people's existing land use practices and their control over natural resources will be one of the activities. Also in the other studies, traditional and local knowledge shall be integrated into the findings and analysis.

1.3.3 Economic and Legal Aspects

The challenge of implementing REDD+ in Ghana is in preserving natural resources so that they continue supporting economic growth, as forestry, wildlife and the mining account for almost 15% of gross domestic production. As about 70 % of the population highly depends on the utilization of natural resources for their livelihood, environmental governance has a vital role for the future of the country. There is thus a need for continuous improvement of the policy, regulatory and institutional framework in the area of natural resources, while strengthening the consultation processes in order to include stakeholders with potentially different interests as part of the process.

The legal regime concerning trees can be regarded as an institutional factor among the drivers of deforestation and forest degradation, as benefits from logging do not reward the small farming population who consequently has no economic incentive to grow trees. This aspect is a major issue for the development of REDD+ mechanisms, considering the fact that sustainable land-use systems must be developed with and to the benefit of local populations.

The major crop in Ghana's forest zone, cocoa, has shaped the zone for a long time. It is mostly produced by small-holders of the high forest zone. Recently, the development of medium and low-shade varieties has increased the rate of tree cover loss. It is widely, agreed that the reinstatement of traditional varieties, which depend on much more shade and humidity, would have a positive impact on the carbon cycle in Ghana. The viability of the reintroduction of traditional varieties however depends on the development of systems that offer the population new possibilities for revenue, as e.g. with trees for fruit, fodder, medicine or fuel wood production.

1.3.4 Environmental aspects

The condition of Ghana's forests has been in decline for many years, particularly since the 1970s. Many forest reserves are heavily encroached and degraded, and the off-reserve stocks are being rapidly depleted. Immediate drivers include: forest industry over-capacity; policy/market failures in the timber sector; burgeoning population in both rural and urban areas; increasing local demand for agricultural and wood products; high demand for wood and forest products on the international market; heavy dependence on charcoal and woodfuel for rural and urban energy; limited technology development in farming systems and continued reliance on 'slash and burn' methods to maintain soil fertility and fire as a tool in land management (Forestry Commission 2010).

¹⁰E.g. http://pdf.usaid.gov/pdf_docs/PNACA562.pdf, <http://ir.ucc.edu.gh/dspace/bitstream/123456789/947/1/Awuah-Nyamekye.pdf> , 10.4.2012.

Deforestation in Ghana usually commences with the degradation of well-stocked forests by excessive (often illegal) logging, slash-and-burn agriculture, mining and quarrying, and fuelwood collection. Degraded forests are then often completely deforested by wildfire, illegal occupation and/or land-use changes. These destructive forces are influenced by population pressure and poverty and also by infrastructure and economic development programs. Road construction near or within forest reserves facilitates encroachment. Internal migration to the western forests for cash-crop cultivation accounts for the high rate of forest degradation in those areas. An estimated 395 000 hectares of primary forest remain in Ghana, but no estimates were available of the area of degraded primary forest, secondary forest or degraded forest land. Almost all forests have suffered depletion, creating eroded hillsides in some cases and destroying genetic diversity in others. FAO (2010) reported a change in natural forest area of 677 000 hectares between 2005 and 2010, an annual average loss of 135 000 hectares. At estimated 66 500 hectares of wet evergreen, moist evergreen and moist semi-deciduous forest (southwest) in the PFE were formally converted to agriculture in the most recent five-year reporting period.

Forest fires affect an estimated 500 000 hectares of forest per year, the majority (80%) of which are unplanned (FAO 2010). Excessive logging can make the forests more vulnerable to fire by causing the accumulation of residues, which become readily flammable when dry. Illegal forest activities, including the use of portable chainsaw mills, are widespread in the high-forest zone, particularly in off-reserve areas. The invasion of woody weeds affects an estimated 50 000 hectares of forest lands.

Around 2,555,900 ha of Ghana's forests are protected areas (forest reserves and national parks). These areas, despite being designated "protected" and still hosting high biodiversity, are considered as "partly to mostly degraded", as stated in the FIP. The remaining forest areas are considered "off reserve" and comprise a variety of land use types. However, in the high forest zone, mixed patterns with cocoa, food crops and fallow are dominant. Agricultural land use has dramatically expanded at the expense of forests over the past decennia. According to the Cocoa Board, cocoa production expanded almost 150% between 1999 and 2002 and is still expanding.

The Economic Sector Work (ESW) in Ghana in 2006 led by the World Bank noted that there was an annual cost of deforestation and forest degradation of about 3.5 percent of Ghana's GDP. Data across 46 forest reserves and comparisons with inventories in the 1950s, 1970s, and 1990s, shows that the forest is degrading with a negative basal area of $-0.13 \text{ m}^2 \text{ ha}^{-1} \text{ year}^{-1}$, thus damage from logging is greater than new growth. Off-reserve forest loss also arises from the combined expansion of farming (especially cocoa) and demand for timber from the timber industry, while on-reserve, degradation has accelerated dramatically in the last few decades from excessive logging, encroachment, illegal logging by chainsaw operators and bushfires. Only 1.64 million hectares of forests in Ghana remain in a reasonable to good condition from an initial area of 8.2 million hectares (FIP, p. 12). According to the R-PP (December 2010, p.38), drivers of deforestation are estimated to be for about 50% agricultural expansion, 35% harvesting of wood, 10% population and development pressures, and 5% mineral exploitation and mining.

2 PART 2: PROJECT RATIONALE AND OBJECTIVES

2.1 RATIONALE

2.1.1 Institutional set-up and organizational issues

The project will be implemented under the supervision of the National REDD+ Secretariat of Ghana. In executing the project, the National REDD+ Secretariat will build on the capacities of the Forestry Research Institute of Ghana (FORIG) and the School of Agricultural, Forest and Food Sciences of the Bern University of Applied Sciences (HAFL), both with proven knowledge, research and capacity building skills in REDD+ development, agriculture and economic benefit

sharing models. One set of activities is the preparation of a main supporting programme to develop on pilots in the framework of the Readiness Preparation Process of Ghana for REDD+.

Regarding monitoring and evaluation, as well as the key project staff and the responsibilities of each project collaborator/organisation, see part 4, section 4.1.

The present REDDES project is inscribed in the overall process of developing Readiness for REDD+ in Ghana under the activity of 1, Analysis, Preparation and Consultation for R-PP Implementation, as outlined in the REDD+ Readiness process (see Figure 3).

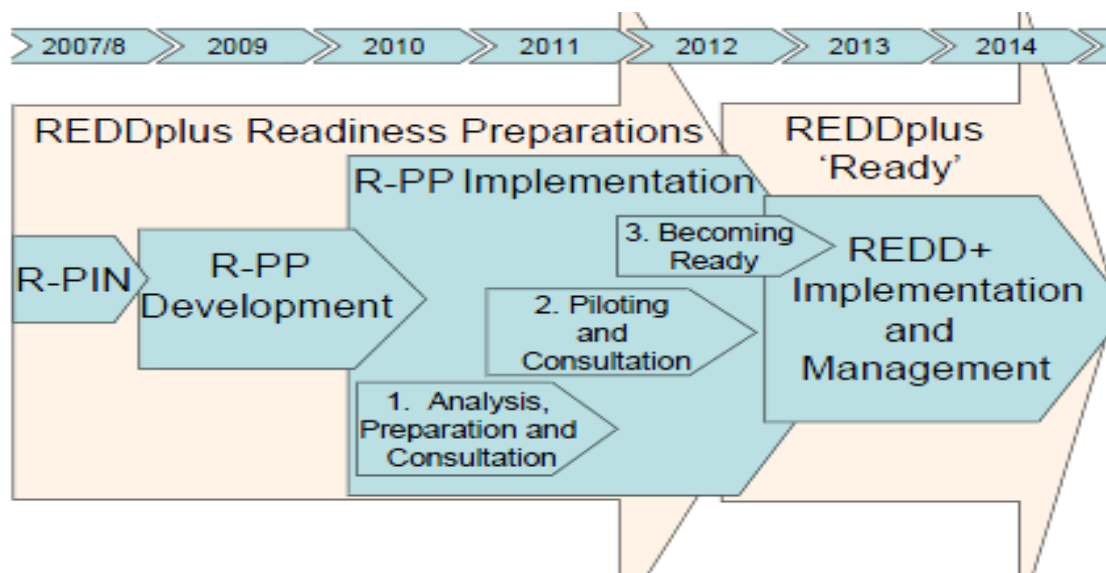


Figure 3: The Phases of Ghana's Process towards REDD+ Readiness (R-PP)

Facilities

As the implementing agency is the REDD+ Secretariat, the logistical basis of the project will be in its offices. For the research works on the ground, FORIG will make necessary logistics available. The senior staff of HAFL will mainly deal with the preparation of the main output, the formulation of a main project supporting Phase two of the Readiness phase, Piloting and Consultation (see Figure 3).

2.1.2 Stakeholder analysis

In the first place, this project is directed at supporting the government of Ghana in its efforts to implement effective policies and programs in forests and woodlands under the REDD+ programme. Therefore, governmental agencies working in the environmental sector and specifically those in the forest sector are the primary stakeholders of this project. **They will be able to develop institutional as well as technical capacities that are adamant to progress, as previous attempts to reform the forestry sector have not prompted decisive results¹¹.**

Communities located in the target area of the project are equally important secondary stakeholders in this project, as the vast analytical work is aimed at contributing to the development of sustainable production systems. In addition, local communities and authorities shall take part in the investigations particularly in issues regarding benefit sharing. **Considering the uncertainty of (the amount of) income from the carbon markets for local communities, the focus on community level is on securing income from forest resources, be it timber or non-timber products. This is critical not only to sustainability, but to REDD+ acceptance in the population.**

¹¹ See e.g. Treue et al.: Challenges and opportunities in implementing REDD at the national level: the case of Ghana. IOP Conference Series Vol 6(2009) 250006

Table 1: Tabular Analysis of Project Stakeholders

Stakeholder group	Characteristics	Problems, needs, interests	Potentials	Involvement in project
Primary stakeholders				
Forestry Commission	Has the overall mandate of managing Ghana's forest and wildlife resources including the off-reserve areas	Concerned about off-reserve forest degradation but lacks information on options for sustainable management	Institutional capacity to mainstream project results	Partner institution
Ministry of Food and Agriculture	Has national mandate for ensuring efficient food and cash crops production	Needs well managed environment to sustain agricultural production	Technical capacity to contribute to project development and implementation	Share experience with Project staff
Environmental Protection Agency	Mandated to ensure compliance with environmental standards	Concerned with the environmental consequences of land degradation	Competence in environmental education, can help ensure compliance with standards	Partner institution
District Assemblies	Have local governance role and responsibilities. Benefit from off-reserve timber trade	Concerned about local impoverishment when lands get degraded	Authority to provide legal backing to local bye-laws	Project partners
Ministry of Lands and Natural Resources	Responsible for policy and governance issues relating to natural resources	Concerned with the loss and degradation of forests	Can take up project outcomes for possible review of a national policy on off-reserve areas	Collaborator
Secondary stakeholders				
Local cocoa farmers, food crop farmers, fuel wood collectors, small scale loggers, chainsaw operators	Manage and Convert secondary forests into farms, harvest trees for timber and fuelwood,	Suffer the direct consequences of land degradation Lack arrangements for sustainable management of off-reserve forest areas	A strong desire for a change, high enthusiasm to collaborate, useful local knowledge	Ultimate project beneficiaries, articulate local livelihood and environmental concerns
Tertiary stakeholders				
Traditional authorities (chiefs, elders, priests)	Hold land custodianship, enforce local bye-laws (rules)	Concerned about the welfare of their areas and people	Wielding high authority and respect, they can help enforce local bye-laws	Collaborators
Social groups-religious groups, youth groups, etc.	Identifiable groups in the local communities	Concerned about the welfare of their members	They can influence the attitude of their members towards trees and forests	Collaborators
Media	Radio, TV and print media	Create awareness of initiatives and events	Can help create public awareness of the importance of project	Collaborators

2.1.3 Problem analysis

There are two problem fields at the origin of this project that are located on different levels but are still closely interconnected. First, there is the great challenge of deforestation and forest degradation in Ghana, accentuated through global climate change. Secondly, on a technical level, there are the challenges of the internationally prompted REDD+ programme, which calls for new institutional schemes that need to be developed and implemented. This project thus needs to produce results that address the challenge of deforestation and degradation within the processes of the REDD+ programme and the corresponding goals. This also enables the alignment of the project with national policies.

Regarding the basic problem of deforestation and forest degradation, a useful analysis can be found in the FIP (p. 15-22). The analysis distinguishes between principal and underlying drivers. Principal drivers of deforestation and forest degradation thus are agricultural expansion (50%), harvesting of wood (35%), population & development pressures (10%) and mineral exploitation and mining (5%). The factors affect geographical zones in different intensities. According to the same report, the underlying causes of deforestation can be summarized as follows:

<i>Underlying Drivers</i>	<i>Specific underlying drivers</i>
Policy and governance issues	Weak enforcement of regulations
	Weak regulatory mechanisms and rights regimes
	Excessive Central Control
	Conflicting government policies e.g. cocoa price support
Economic forces	Growing domestic demand
	Inefficient logging and milling industry
	Market failures
	Forest royalty system where trees are undervalued
Demographic factors	Population Growth
	High demand for wood products
	High demand for fuelwood
	Agricultural expansion

All these factors result in a decline of forests through land conversions and a low rate of rehabilitation of degraded forest lands. The challenge is to define land-use practices that are sustainable (economically, socially and environmentally viable) for small-scale farmers and other actors using land-resources in the light of climate change. Potential REDD+ mechanisms present a new opportunity to be taken into account.

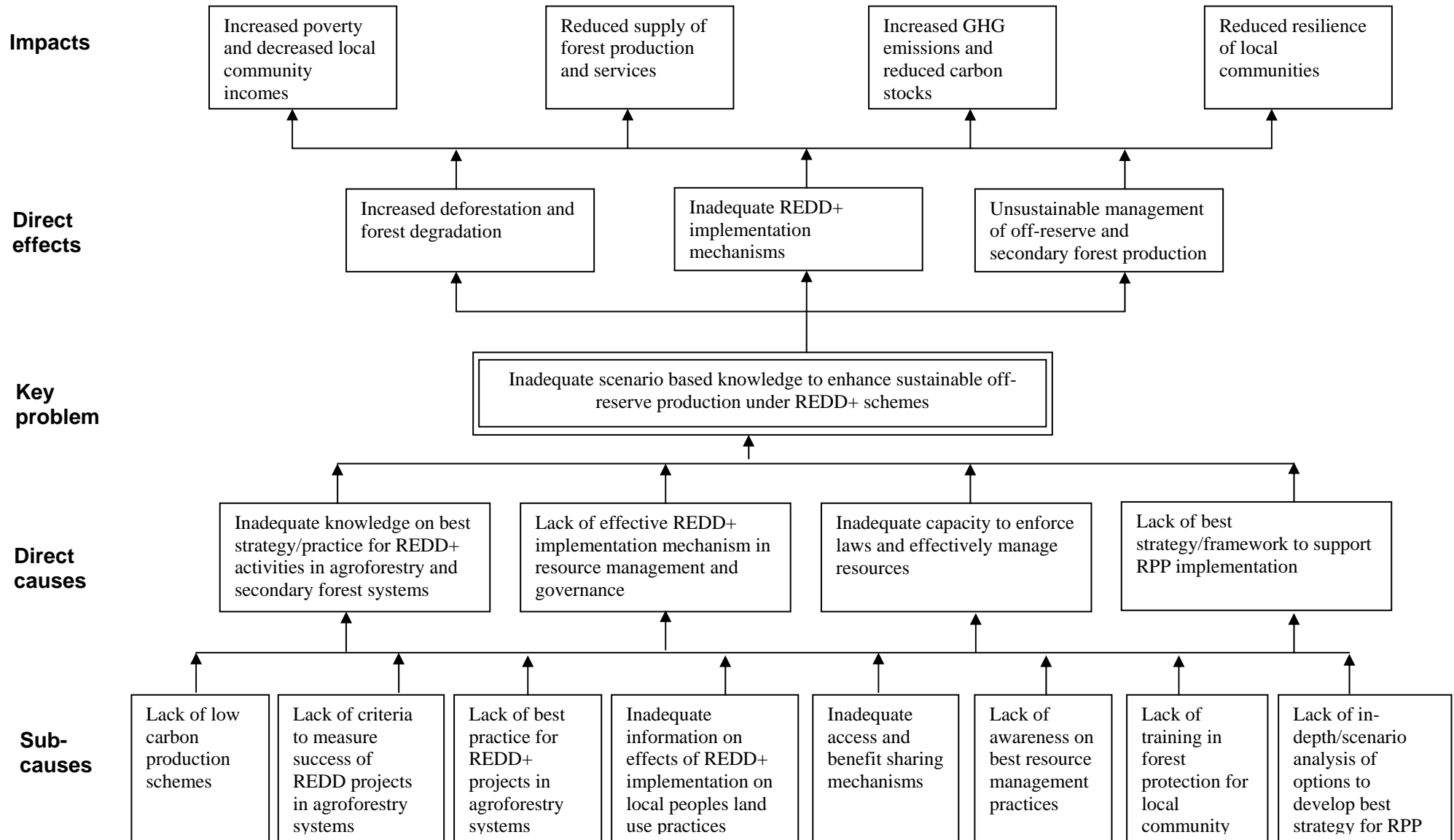
The fast decline of the off-reserve tree stock in the humid zone of Ghana is of particular concern. This was formerly government policy (off-reserve areas being earmarked for progressive conversion to agriculture and other non-forest uses), but a policy change in 1994 in favour of sustainable production has failed to detain the decline. Rights over trees are held by the state in trust for the nation, and income is distributed according to a Constitutional formula in which revenues (net of Forestry Commission and Office of the Administrator of Stool Lands charges) are shared between District Assemblies, Stool and Traditional Authorities. This does not adequately incentivise the small farming population who would rather keep economic timber trees off their land than risk collateral damage from timber operations to their beverage and food crops. Reform of the tree tenure regime is widely viewed as a necessary precondition for reinvigoration of the off-reserve stock, and will be addressed in the REDD+ strategy. This is made all the more urgent by the huge scale of unregulated chainsaw logging (all of it officially illegal). While this does fill an important gap in supplying the local market, it is a major contributor to forest degradation. Increased incentives to tree plantations are also likely to be requested by the commercial timber

industry for it to survive. A new commercial plantations policy and a modified *taungya* programme have recently been put in place.

For over a century, cocoa has been the major driver of land use change in the high forest zone, and the new full-sun varieties which are now widely adopted have accelerated the pace of deforestation. The traditional varieties require much denser crown cover and, in the past, their need for high atmospheric humidity encouraged the farming population to support the forest reserve policy. Their reinstatement would have much to commend it.

Agricultural technologies are generally under-developed, particularly in the smallholder sector which dominates the rural economy, and low purchasing power is a major constraint. Farm and livestock management practices are characterised by low-input technologies and risk-aversion strategies. Fire is integral to the agricultural cycle in many areas, and the major means of land preparation and plant diseases control. Agro-industrial enterprise has had a poor record to date, though development of the sub-sector is a government priority. A major programme of investment will be required to develop the agricultural and pastoral economies in more carbon-friendly directions, balancing the interests of the smallholder and industrial sectors.

Problem Tree Analysis of Advancing REDD+ in Ghana: Preparation of REDD+ Pilot Schemes in Off-Reserve Forests and Agroforests



2.1.4 Logical Framework Matrix

Project Element	Indicators (except the development objective, indicators are to be evaluated by the end of the pre-phase)	Means of verification	Assumption
<i>Development objective</i>			
To contribute to the strengthening of Ghana's capacity to effectively manage REDD+	<ul style="list-style-type: none"> Ghana has successfully entered into the REDD+ implementation phase Several communities apply production systems that are sustainable and contribute to carbon sequestration 	<ul style="list-style-type: none"> RPP-implementation monitoring scheme ITTO/REDDES evaluation report 	REDD+ implementation continues as well as other related projects in the area with the same goals
<i>Specific objective</i>			
Provide Ghana with proposals for the enhancement of sustainable off-reserve production systems under REDD+ schemes with a focus on local livelihood improvement	<ul style="list-style-type: none"> Concrete pilots are established and ready to be incorporated into REDD+ strategies Production of applicable knowledge regarding Ghana's carbon balance 	<ul style="list-style-type: none"> Project report REDD+ strategy documents Field visits 	Political (at national and international level) will to continue REDD+ process persists
<i>Outputs and activities</i>			
<p style="text-align: center;"><i>Output 1</i></p> <p>Analysis of possible pilots for REDD+ activities in agroforestry and secondary forest systems</p> <p><i>Activities</i></p> <p>1.1 Classify a set of potential REDD project types based on the forest ecosystem type, deforestation/degradation (DD) drivers and the tenure basis;</p> <p>1.2 Develop set of criteria for 'successful' REDD projects, focusing on economic and technical viability, as well as allowing for co-benefits and policy priorities;</p> <p>1.3 Select high potential project types based both on the scores and a more qualitative analysis of key constraints;</p> <p>1.4 Analytical studies for the development of REDD+ pilot projects in the following fields (desk study + field work):</p>	<ul style="list-style-type: none"> Analysis of possible low carbon production schemes, benefitting the rural population, conducted Proposals for REDD+ pilots formulated and discussed with a range of relevant stakeholders 	<ul style="list-style-type: none"> Feasibility reports 3-4 thesis (Ghana and Switzerland) documents with concrete proposals for viable production schemes that optimize organic production as well as carbon management as input for concrete 	Access to persons, land & documents to produce meaningful data; Research capacities available

<p>1.4.1 Off-reserve plant production and combinations</p> <p>1.4.2 Cost-Benefit Analyses along the Value Chain of Different Wood Products</p> <p>1.4.3 Fair Trade labeling of Cacao: Impact regarding small-scale farmers and carbon management</p> <p>1.4.4 Comparison of potentials to enhance carbon pools and avoid emissions from deforestation and degradation in different climatic zones</p>		pilots	
<p style="text-align: center;"><i>Output 2</i></p> <p>Identification of effective REDD+ implementation mechanisms in management and governance</p> <p><i>Activities</i></p> <p>2.1 Study the potential effects of REDD+ implementation on local people's existing land use practices and their control over natural resources</p> <p>2.2 Develop elements to tackle access & benefit sharing mechanisms with a focus on opportunities to benefit from REDD+ for key stakeholders, including fringe communities</p> <p>2.3 Development of options for incentive mechanisms that reward farmers and rural communities for adopting sustainable land use practices</p>	<ul style="list-style-type: none"> • REDD+ implementation mechanisms are discussed within the REDD+ Steering Committee • Elements for benefit sharing schemes are developed so that results can be fed into the main project • Options formulated for rewarding ecosystem services 	<ul style="list-style-type: none"> • Communications/reports by the REDD+ Steering Committee • Report on the implementation of ABS mechanisms in Ghana? 	
<p style="text-align: center;"><i>Output 3</i></p> <p>Capacity Building in view of improving institutional capacity for resource management and enforcement of regulatory policies</p> <p><i>Activities</i></p> <p>3.1 Capacity building for community groups about the potential of forest/tree protection</p> <p>3.2 Workshops for the sharing of results and conclusions of studies</p> <p>3.3 Publication and dissemination of studies' results</p>	<ul style="list-style-type: none"> • A publication of the results of output 2 and 3 is prepared and scheduled for completion, including a distribution plan • Workshop reports on the contents discussed are available for participants and project stakeholders 	<ul style="list-style-type: none"> • Publication • Workshop reports (on website) • Media reports? 	<p>Stakeholders willing to participate in workshop/interested in results Publisher interested</p>

<p style="text-align: center;"><i>Output 4</i></p> <p>Design of a main support component for pilots in the implementation phase of the RPP</p> <p>Activities</p> <p>4.1 Analysis of the actual REDD+ pilots and of possible off-reserve schemes</p> <p>4.2 Formulation of support elements and design of a bilateral project proposal, incl. detailed logframe that fits into the RPP implementation process</p> <p>4.3 Discussion Workshops for Verification/Feedback of stakeholders</p> <p>4.4 Defining the further role of ITTO in implementing the pilots in the RPP</p>	<ul style="list-style-type: none"> • A comprehensive project proposal for the main phase of the REDDES project including the institutional setting for the implementation of the main phase is available 	<ul style="list-style-type: none"> • Project document • Field visit reports • Workshop reports 	<p>Access to persons, land & documents to gather relevant information for analysis</p>
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2.2 OBJECTIVES

2.2.1 Development objective and impact indicators

The wider development perspective of this proposed project is ***to contribute to the strengthening of Ghana's capacity to prevent and reduce deforestation and forest degradation***. Despite many initiatives taken for forests and woodlands, Ghana's forests continue to decline in size and quality. This has negative economic, social and not at least long-term environmental impacts. REDD+ as a new framework has the potential to combine important forces in the area, as far as adapted to the Ghanaian context. Better management of the remaining amount of forest and for the restoration of degraded forests is a major concern that can be addressed through well developed REDD+ mechanisms.

However, REDD+ institutionalisation needs to be in line with enabling policies so that the expected impacts can be achieved. **The impact indicators are (i) reduction of carbon emissions and the enhancement of carbon stocks, (ii) livelihoods of forest-dependent people secured and (iii) local community are resilient to climate change**

2.2.2 Specific objective and outcome indicators

The proposed project supports Ghana in the preparation of its low-carbon development strategy and its efforts to reduce GHG-emissions through reducing deforestation and forest degradation and enhancing of carbon stocks (REDD+), an approach that has been endorsed by the UNFCCC in a number of major decisions since 2008. Specifically, ***the project aims at providing Ghana with proposals for the enhancement of sustainable off-reserve production systems under REDD+ schemes with a focus on local livelihood improvement.***

The proposed project is aimed at providing the background information for the review and implementation of the REDD+ pilot projects. Thus the outcome indicators will include the following (i) Several communities apply production systems that are sustainable and contribute to carbon sequestration (ii) Increased participation of local community groups participating in the implementation of REDD+ pilots. (iii) Change in behaviour of local communities as a result of participating in REDD+ projects developed, (iv) Enhanced positive impact of successful REDD+ implementation on local people, (v) Effective benefit sharing and incentive mechanism that can be easily applied to support the implementation of REDD+ projects (v) Successful implementation of REDD+ pilots.

The greatest potential for REDD+ in Ghana is in carbon enhancement, which means better management of the remaining relatively small amount of forest and in restoring degraded forests. The potential so far has been regarded as mostly within the High Forest Zone (HFZ), including shade-grown cocoa (cocoa culture is primarily carried out in the HFZ) although there is no reason that REDD+ could not be extended to the savanna woodlands of Northern Ghana. In developing its pilots, the project needs to take into account that there are parallel challenges that remain to be addressed before REDD+ will be successful, including land and tree tenure issues, carbon rights, benefit sharing, illegal logging, current methods of cocoa production, and carbon measurement, reporting, and verification methods.

Moreover, there are technical issues that arise when considering how Ghana will implement REDD+, namely; setting a baseline (reference scenarios), carbon accounting, and monitoring, reporting and verification (MRV). Another issue is that the national definition of forests so far has tended to exclude most of the savanna areas as not being forests under REDD+ definition.

During the REDDES project, relevant information shall be produced in view of the further implementation of agricultural and secondary forest productions schemes that feature climate smart practices, not the least in view of likely benefits accruing from a potential carbon market. Through the combination of technical and institutional development, applicable knowledge shall be produced in view of improving Ghana's carbon balance.

2.2.3 Expected outcomes at project completion

REDDES aims at producing information that can be fed into the operationalization of Ghana's proposed REDD+ strategy scheme that includes two broad themes: timber policy and agro-forestry. Therefore, various studies will be implemented to provide background for the development of pilots under REDD+, in particular with off-reserve productions schemes that optimize organic production of commercial crops, such as cocoa, allanblackia, cashew, etc. The approaches shall combine poverty alleviation with low carbon strategies. Further analytical work shall be done for the development of benefit sharing schemes.

In addition, REDDES will support the REDD+ strategy formulation in Ghana and set up a proposal for the implementation of pilot actions under the REDD+ preparation. The pilots of the main phase will benefit the strategy formulation through concrete experiences.

Analytical work and pilot preparations are intended to work hand in hand in order to inform the strategy formulation **so that the REDD+ schemes can be chosen that provide the highest benefit to the nation and communities**. The approach ultimately aims at creating opportunities for additional income through the optimization of production schemes, including carbon certificates.

3 PART 3: DESCRIPTION OF PROJECT INTERVENTIONS

3.1 OUTPUTS AND ACTIVITIES

3.1.1 Outputs & indicators

The present REDDES project aims at producing results in four fields, summarized as follows:

- 1) Analysis of possible pilots for REDD+ activities in agricultural and secondary forest systems
- 2) Identification of effective REDD+ implementation mechanisms in management and governance
- 3) Capacity building in view of improving the institutional capacities needed for effective resource management and the enforcement of regulatory policies
- 4) The previous results will be fed into the design of a project document for a main phase, including its institutional setting.

In the main phase following this REDDES project, the ITTO-SECO collaboration is foreseen to support the further implementation of Ghana's REDD+ strategy through piloting concrete actions in the fields of off-reserve value chain development, sustainable energy and fuel wood production, low-carbon development schemes as well as benefit sharing mechanisms.

- 1) Analysis of possible pilots for REDD+ activities in off-reserve forests, agroforests and secondary forest systems

This output targets possible REDD+ project from different angles. Its focus is on the analysis of possible pilots for REDD+ activities in agroforestry and secondary forest systems. Thereby, it should focus on the analysis of current projects (national pilots and others) and identify those that look most feasible, as well as add in new ideas and thinking for project opportunities. The first approach thus is to develop a broad framework or strategy for the identification of priority areas within which national pilot project proposals could be submitted for funding, using the 8 NAMAs as fundamental framework. In addition, synergies with the already identified 12 R-PP pilots should be sought.

This output on the other hand could focus on developing proposals to optimize production of commercial crops such as cocoa, cashew or allanblackia that is productive, climate smart (mitigation) and environmentally responsible. It aims at enabling a transition from agricultural systems that cause emissions through forest conversion and degradation, to a climate smart

farming systems that conserve or sequester CO₂ in the biomass and soil and thus provide a pathway for significantly reducing emissions associated with the agricultural and tree crop sectors. Alternative crops could work as incentives for smallholders to retain or enhance forests or woodlands. A clear focus is also on useful schemes for carbon management. Furthermore, the analysis of secondary forest dynamics, the role of sacred groves, as well as fuelwood production systems could be considered.

The results will be mainly done through analytical work by MSc researchers from Switzerland and researchers from Ghana (HAFL, FORIG), and/or by experts on production systems.

2) Identification of effective REDD+ implementation mechanisms in management and governance

Output 2 of the project is on the identification of effective REDD+ implementation mechanisms in management and governance. Successful implementation of REDD+ mechanisms need a clear focus on mechanisms for benefit sharing. Local people will participate in carbon management activities only if there are incentives from increased income and/or other benefits. Therefore, management and governance requirements of REDD+ implementation should be analyzed in terms of outcomes for local populations, including the feasibility of the new proposals regarding existing land use practices and their actual control over natural resources. Land and tree tenure systems need to be addressed before REDD+ schemes can be effective. It is of particular importance to understand stakeholders' needs in this context, and to include them and their knowledge¹² in planning and decision making. The experiences of communities must be fed into the development of REDD+ projects.

3) Capacity Building in view of improving the institutional capacities needed for effective resource management and the enforcement of regulatory policies

This output will result in capacity building in view of improving the institutional capacities needed for an effective resource management and the enforcement of regulatory policies. It aims at enhancing knowledge among various stakeholder groups, especially local communities, so that they have the instruments to actively participate in the developments and policy building regarding climate change. In REDDES, local communities should be able to share the knowledge gained from the analytical work done under the project. The role of potential multipliers of both gender, should be analyzed. Moreover, the national and international scientific community should benefit from getting access to new experiences and results from assessments regarding REDD+ implementation. The dissemination of results should also be prompted through the established institutions of Forest Watch and Forest Forums that proved effective for the VPA agreement. Further capacity building initiatives will be undertaken in the main phase of the projects, e.g. regarding more specific support on the policy level, e.g. a monitoring, reporting and verifications (MRV) framework.

4) Design of a project document to support REDD+ pilots in the RPP framework

Output no. 4 is chronologically put at the end of the other activities. The result will be a project document on supporting the REDD+ readiness process in Ghana to be submitted by the REDD+ Secretariat to the Swiss State Secretariat for the Economy (SECO). This component of the present REDDES project aims at the preparation of an adequate institutional setting for the implementation of the main phase, where pilot projects with viable crop production/carbon schemes and identified other low-carbon development schemes in REDD+ will be realized. The availability of a comprehensive and detailed work plan, including a background study on the current status, progress of R-PP as well as a careful analysis of stakeholders and key resources is the indicator of

¹² According to The Forests Dialogue, local people have a clear understanding how benefit sharing would work in their communities,
http://www.growingforestpartnerships.org/sites/growingforestpartnerships.org/files/gfp_REDDReadinessRequiresRadicalReform.pdf, p. 25.

this output. A clear monitoring scheme for the implementation of pilots needs to be established. This planning will be done under particular responsibility of HAFL, and in close collaboration with key partners in Ghana, not the least in order to have a clear understanding on the technical and management capacities of public sector agencies in the country and to assess potential risks in implementation. The consultants shall take the Guidelines for the involvement of stakeholders in projects, elaborated by the Working Group on Consultation and Participation in the REDD+ framework, into consideration.

3.1.2 Activities

- 1.1 **Classify a set of potential REDD+ project types in off-reserve areas, agroforests and secondary forests in the various biomes and link to DD analysis and the tenure basis (desk study);**
- 1.2 Develop set of criteria for 'successful' REDD+ projects, focusing on economic and technical viability, as well as allowing for co-benefits and policy priorities (desk study);
- 1.3 Select high potential REDD+ project types based both on the scores and a more qualitative analysis of key constraints (desk study + field visits);
- 1.4 Analytical studies for the development of REDD+ pilot projects in the following fields (desk study + field work):
 - 1.4.1 Off-reserve crop and tree production and combinations
 - 1.4.2 Cost-benefit analyses along the value chain of different wood products
 - 1.4.3 Fair Trade labeling of cacao: Impact regarding small-scale farmers under specific consideration of agroforest carbon management
 - 1.4.4 Analysis of potentials and limits to enhance carbon pools and avoid emissions from deforestation and degradation in different biozones of Ghana
- 2.1 Study the potential effects of REDD+ implementation on local people's existing land use practices and their control over natural resources (desk study + field work)
- 2.2 **Develop basic elements to tackle access & benefit sharing mechanisms in off-reserve areas and agroforests in the main phase of the project with a focus on opportunities to benefit from REDD+ for key stakeholders, including fringe communities (desk study + field work)**
- 2.3 **Development of options for incentive mechanisms that reward farmers and rural communities for adopting climate-smart and low carbon land use practices (desk study + field visits)**
- 3.1 Capacity building for community groups about the potential of forest/tree protection
- 3.2 Workshops for the sharing of results and conclusions of analytical studies
- 3.3 **Publication of studies' results and dissemination through ITTO**
- 4.1 **Analysis of the actual REDD+ preparations in off-reserves and agroforest schemes**
- 4.2 **Formulation and design of the main project to support REDD+ pilots development in off-reserve areas and agroforests in the RPP framework**
- 4.3 Validation workshop of the project proposal (based on RPP stakeholder consultation process)
- 4.4. Defining the further role of ITTO in implementing the REDD+ pilots in the RPP framework

Responsibilities for delivery are specified in the workplan in chapter 3.3.

3.2 Implementation approaches and methods

The REDDES project is embedded in the framework that is already established for the Readiness Process aiming at the REDD+ implementation. This guarantees, in the first place, that the consultation processes with relevant stakeholders will be assured and that full coordination with the ongoing work in readiness (Phase 1 of the RPP) is taken place.

The Executing Agency, the **REDD+ Secretariat of the Forestry Commission (FC)**, will oversee the project activities in view of the preparation of the main project to support pilots in the framework of the RPP. The REDD+ Secretariat has been set up to facilitate the REDD+ agenda of the country. The Secretariat forms part of the overarching Sector Implementation Committee known as the Natural Resources and Environmental Governance Technical Coordination Committee (NREG TCC) which has been operational for three years to broadly facilitate the implementation of all natural resources and environment donor funded programmes. The NREG TCC will form the basis for overall guidance of the REDD+ programme in Ghana. The REDD+ Secretariat will be responsible for the overall administration of the project, and coordinate all activities undertaken by collaborating agencies. The REDD+ Secretariat has already coordinated and undertaken numerous projects which indicate its capacity to carry out this particular work.

Collaborating Agencies and responsibilities: Both public and non-governmental agencies as well as local communities will be involved at various levels in the implementation of the project. The collaborating partners in the public sector will be i) Forestry Research Institute of Ghana (FORIG) and the Faculty of Renewable Natural resources (FRNR) of the Kwame Nkrumah University of Science and technology (KNUST). The latter will contribute towards the project through FORIG.

The Forestry Research Institute of Ghana (FORIG) will, together with the team of the School for Agricultural, Forest and Food Sciences of the Bern University of Applied Sciences (HAFL) be responsible for delivery of the outputs to the REDD+ Secretariat. FORIG has the mandate to undertake forest and forest products research to ensure sustainable management and utilization of Ghana's forest resources and to engage in the commercialisation of research results and services. FORIG has over the years developed a number of technologies to support the development of the forest sector in Ghana. These include ecophysiological requirements for regeneration of indigenous species, improved seeds and seedlings for planting, vegetative propagation techniques for indigenous species and silvicultural techniques for optimum growth of forest species. The Institute is very much endowed with facilities and expertise for efficient execution of research and development activities. FORIG has over the years executed many ITTO funded projects. FORIG with its experience in executing ITTO projects will help with project planning and implementation.

Participation of Local Communities and Non-governmental agencies: Local communities will be heavily involved in various stages of the execution of the project, including inception workshop to introduce the project to the participating communities in their respective districts, formation of community based REDD+ project management, capacity building and education on importance and threats to forests. The project will further provide support for training and skills development, natural resource management expertise, and awareness creation for communities.

In addition other strategies to be employed in achieving the project objectives will include:

Public forums: Multi-stakeholder consultations will be used to take stock of REDD+ initiatives in place so far, as well as to concretely analyze promising strategies for pilot projects in Ghana. This is particularly important in the development or enhancement of off-reserve production systems under REDD+ schemes in Ghana.

Capacity building: The capacity of institutions responsible for REDD+ implementation will be built in the following areas; resource management planning, monitoring and evaluation, negotiations and conflict management, assessment of carbon stocks and emissions. These skills will be needed for effective resource management and the enforcement of regulatory policies.

Awareness creation and knowledge on REDD+ at local and regional levels: Approaches here would involve organization of workshops at the local and regional levels. Information delivery through community radio broadcast will also be employed. Brief education materials on REDD+ in simple and easy to read languages will be published and distributed to relevant stakeholders.

Partnership building: Two key institutions in the management of forests in Ghana, the Forestry Research Institute of Ghana (FORIG) and the Forestry Commission (FC) are partners in the

implementation of this project. FORIG is the institution in Ghana mandated to carry out research in forestry and relevant sectors while the FC is responsible for the utilization, conservation and management of forest and wildlife resources, and the coordination of related policies. Their roles will strengthen the technical and other relevant aspects of the project. Their involvement will also ensure an institutional linkage between public sector institutions and other international collaborating institutions.

3.3 WORKPLAN

Output & activities	Primarily responsible party	Q1	Q2	Q3	Q4
		12/12- 2/13	3/13 – 5/13	6/13 – 8/13	9/13 – 11/13
1. Analysis of possible pilots for REDD+ activities	REDD+ Secretariat				
Classify a set of potential REDD project types	FORIG				
Develop set of criteria for 'successful' REDD projects	FORIG				
Select high potential project types	FORIG				
Analytical studies for the development of REDD+ agroforest pilots	HAFL/FORIG partnership				
2. Identification of effective REDD+ implementation mechanisms in management and governance	REDD+ Secretariat				
Impact study of REDD+ implementation on local people	FORIG				
Elements for access & benefit sharing mechanisms	FORIG				
Options for incentive mechanisms for sustainable land use practices	FORIG				
3. Capacity Building in view of improving institutional capacity for resource management and enforcement of regulatory policies	REDD+ Secretariat				
Capacity building for community groups about the potential of forest/tree protection	FORIG				
Workshops for the sharing of results and conclusions of studies	FORIG				
Publication and dissemination of studies' results	HAFL				
4. Design of a main implementation project for piloting REDD+ in the framework of the RPP Implementation	REDD+ Secretariat with HAFL				
Analysis of the actual REDD preparations and of possible off-reserve schemes	FORIGH, HAFL				
Project formulation and design of the main project proposal	REDD+Secretariat, HAFL				
Discussion Workshops for Verification/Feedback of stakeholders	REDD+ Secretariat, SECO				
Defining further role of ITTO in implementing the pilots in RPP	REDD+ Secretariat/SECO				

3.4 BUDGET

3.4.1 ACTIVITY AND COMPONENT MASTER BUDGET TABLE

Outputs/ Activities	Description	Budget Compon ent	Quantity	Unit	Unit Cost	Total	*Source (ITTO or EA)
Output 1	Analysis of possible pilots for REDD+ activities						
A 1.1	Classify potential REDD project types						
	National Expert (Climate Change and REDD)	11.2	12	days	500	6000	ITTO
	DSA	31.1	12		100	1200	ITTO
	Research Assistant (Climate Change)	12.1.1	15	days	200	3000	ITTO
	DSA	31.1	15		50	750	ITTO
	Fuel	33.2	200	gal	4	800	ITTO
	Vehicle hire/transportation	33.1	7	times	100	700	ITTO
A 1.2	Develop criteria for successful REDD projects						
	National Expert (Climate Change and REDD)	11.2	12	days	500	6000	ITTO
	DSA	31.1	12		100	1200	ITTO
	Research Assistant (Climate Change)	12.1.1	15	days	200	3000	ITTO
	DSA	31.1	15		50	750	ITTO
	Fuel	33.2	200	gal	4	800	ITTO
	Transportation	33.1	7	times	100	700	ITTO
A 1.3	Select high potential project types						
	National Expert (Inventory and Ecology)	11.3	14	days	500	7000	ITTO
	DSA	31.1	14		100	1400	ITTO
	Research Assistant (Inventory and Ecology)	12.1.2	10	days	200	2000	ITTO
	DSA	31.1	10		50	500	ITTO
	Fuel	33.2	300	gal	4	1200	ITTO
	Transportation	33.1	8	times	100	800	ITTO
A 1.4	Analytical studies for the development of pilots						
	Developments of pilots/MSc training	14.1	3	Lump sum	9400	2820 0	ITTO
	National Research Assistants	12.1.3	3	Mont hs	250	750	ITTO
	DSA	31.1	60		20	1200	ITTO
	Transportation	33.1	12	Lump sum	100	1200	ITTO
	Fuel	33.2	300	gal	4	1200	ITTO
Output 2	Identification of REDD+ implementation mechanisms						
A 2.1	Impact study REDD+ implementation						
	National Forestry Expert	11.4	12	days	500	6000	ITTO
	DSA	31.1	12		100	1200	ITTO
	Fuel	33.2	300	gal	4	1200	ITTO
	Transportation	33.1	8	Lump sum	100	800	ITTO
A 2.2	Development of Access and Benefit sharing mechanisms						
	National Expert (Socio-Economist)	11.5	10	days	500	5000	ITTO

	DSA	31.1	10		100	1000	ITTO
	Research Assistant (Socio-Economist)	12.1.5	12	days	250	3000	ITTO
	DSA	31.1	12		50	600	ITTO
	Fuel	33.2	100	gal	4	400	ITTO
	Transportation	33.1	6	Lump sum	100	600	ITTO
A 2.3	Develop mechanisms for sustainable land use practices						
	National Expert (Agroforester)	11.6	10	days	500	5000	ITTO
	DSA	31.1	10		100	1000	ITTO
	Research Assistant (Agroforester)	12.1.6	12	days	250	3000	ITTO
	DSA	31.1	12		50	600	ITTO
	Fuel	33.2	100	gal	4	400	ITTO
	Transportation/Vehicle hire	33.1	6	Lump sum	100	600	ITTO
Output 3	Building of institutional capacity to improve resources management and enforcement of regulatory processes						
A 3.1	Capacity building/training workshop for community groups on potential of forest/tree protection						
	Workshop facilities (including venue, facilitation, transport, materials, etc)	15.2	1	Lump sum	6300	6300	ITTO
	Local community organiser	12.2.2	5		70	350	ITTO
	Scientific Adviser	15.3	2		250	500	ITTO
A 3.2	Feedback Workshops						
	Workshop facilities	15.1	1	Lump sum	6300	6300	ITTO
	Local organiser	12.2.2	5		70	350	ITTO
	Scientific Adviser	15.3	2		250	500	ITTO
A 3.3	Publication of studies' results						
	Research assistance/coordination	12.1.7	10	days	500	5000	ITTO
	DSA	31.1	10		50	500	ITTO
	Layout	51.1	1		2500	2500	ITTO
	Printing	51.1	1		2000	2000	ITTO
	Dissemination	51.2	1	Lump sum	1500	1500	ITTO
	Fuel	33.2	100	gal	4	400	ITTO
	Transportation	33.1	1	Lump sum	100	100	ITTO
Output 4	Designing a main implementation project for piloting REDD+						
A 4.1	Analysis of the actual REDD preparations						
	International Consultant, HAFL	13.2	14	days	500	7000	ITTO
	DSA, local travel costs in Ghana	31.2	12	days	250	3000	ITTO
	International Travel	32.1	2	Air ticket	3000	6000	ITTO
	National Research Associate	12.1.9	8	days	250	2000	ITTO
	DSA	31.1	8	days	50	400	ITTO
	National Transportation	33.1	4	Lump sum	100	400	ITTO
	Fuel	33.2	300	gal	4	1200	ITTO
	Research Manager, HAFL	13.3	12	mont hs	2750	33000	ITTO
A 4.2	Project formulation and design						
	International Consultant, HAFL	13.1	35	days	500	17500	ITTO

	DSA, local travel costs in Ghana	31.2	28	days	250	7000	ITTO
	International Travel	32.1	2	Air ticket	3000	6000	ITTO
	National Senior Consultant	12.2.0	4	days	500	2000	ITTO
	National Research Associate	12.1.9	5	days	250	1250	ITTO
	DSA	31.1	9	days	50	450	ITTO
	Fuel	33.2	300	gal	4	1200	ITTO
	National Transportation	33.1	3	Lump sum	100	300	ITTO
A 4.3	Verification workshops						
	Workshop facilities	15.1	1	Lump sum	6300	6300	ITTO
	Transportation	33.1	3	Lump sum	100	300	ITTO
	DSA	31.1	40	Participants	20	800	ITTO
	Local Community Organisers	12.2.2	4	days	70	280	ITTO
A 4.4	Defining the further role of the ITTO in implementing the pilots in the RPP						
	National Senior Consultant	12.2.0	10	days	500	5000	ITTO
	National Research Associate	12.1.9	10	days	250	2500	ITTO
	Fuel	33.2	200	gal	4	800	ITTO
	Transportation	33.1	1	Lump sum	100	100	ITTO
	Non-activity based expenses						
	Project Co-ordinator	11.1	12	Person-months	350	4200	ITTO
	Project Co-ordinator	11.1	12	Person-months	150	1800	EA
	5 National Researchers/Experts	12	12	Person-months	1200	6,000	EA
	6 Research Assistants	13	12	Person-months	900	5,400	EA
	Administrative staff	12.1.8	12	Person-months	150	1800	ITTO
	Administrative staff	14	12	Person-months	50	600	EA
	Driver	31.4				2160	ITTO
	Contribution to office maintenance (infrastructure, internet and telephone serv.,)	52.4	12	Per month	200	2400	ITTO
	Communication and VISA costs, HAFL	32.2	6	Lump sum	500	3000	ITTO
	Contribution secretariat, HAFL	52.2	1	Lump sum	2000	2000	ITTO
	Contribution secretariat, FORIG/FC	52.3	2	Lump sum	2,500	5,000	EA
	Office supplies	52.1	1	Per year	2,000	2,000	ITTO
	Stationery, utilities and other supplies	51	1	Per year	2,000	2,000	EA

Media (Public Awareness Support)	53.1	1	Per year	1000	1000	ITTO
Transportation for coordination meetings	33.1	1	Per year	300	300	ITTO
Steering/Evaluation Meeting, Accra (Transportation, etc. 2 HAFL Collaborators)	32.3	2	Lump sum	5000	10000	ITTO
Steering committee meeting (local transport, etc)	61	1	Lump sum	5,000	5,000	EA
Auditing	61				2000	ITTO
Contingency						ITTO
Desktop computers and accessories (FORIG and REDD Secretariat)	44.1.2	2		1250	2500	ITTO
Printers (FORIG and REDD Secretariat)	44.1.3	2		500	1000	ITTO
Global Positioning Systems	44.2.1	2		500	1000	ITTO
			Total:		292,990	

*ITTO: International Tropical Timber Organization

EA: Executing Agency (Govt. of Ghana)

3.4.1 Consolidated budget by component (in U.S. Dollars)

3.4.2 Consolidated budget by component			
Category	Description	Total	Year 1
10	PROJECT PERSONNEL		
11	National Experts (Researchers)		
11.1	Project Co-ordinator (FORIG & Ex.Agency)	6,000	6,000
11.2	2 National Experts (Climate change and REDD)	12,000	12,000
11.3	National Expert (Inventory and Ecology)	7,000	7,000
11.4	National Expert (Forestry)	6,000	6,000
11.5	National Expert (Socio-Economist)	5,000	5,000
11.6	National Expert (Agroforester)	5,000	5,000
12	Other Personnel		
12.1	Research Assistants		
12.1.1	Research Assistant (Climate Change and REDD)	6,000	6,000
12.1.2	Research Assistant (Inventory and Ecology)	2,000	2,000
12.1.3	National Research Assistants (MSc)	750	750
12.1.8	Administrative Staff	2,400	2,400
12.1.9	National Research Associate (4.1/2/4)	5,750	5,750
12.2.0	National Senior Consultant (4.2/4)	7,000	7,000
	Research Assistant (Forestry)	0	0
	Research Assistant (Socio-economist)	3,000	3,000
	Research Assistant (Agroforester)	3,000	3,000
	Research Assistant (Coordination of Publications)	5,000	5,000
	Community Staff	980	980
	6 Research Assistants (FC)	5,400	5,400
	5 National Researchers/Experts (FC)	6,000	6,000
13	International Consultants (HAFL)		
13.1	Senior Forestry Consultant	17,500	17,500
13.2	Senior Agricultural Consultant	7,000	7,000
13.3	Research Manager, HAFL	33,000	33,000
13.4	Project Mentoring/Supervision		
14	Fellowships and Training		
14.1	Training (MSc)	28,200	28,200
15	Workshops		
15.1	2 Workshops (Verification and Project Completion)	12,600	12,600
15.2	Capacity building/training workshop for community groups	6,300	6,300
15.3	Scientific Advisor	1,000	1,000
19	Component Total	193,880	193,880
30	TRAVEL		
31	Daily Subsistence Allowance		
31.1	National Experts and Assistants	12,750	12,750
31.2	International Consultants	10,000	10,000
31.3	Others (Research Assistants)	800	800

32	31.4	Driver International Travel	2,160	2,160
	32.1	International Consultants	12,000	12,000
	32.2	Communication and Visa Costs	3,000	3,000
	32.3	Steering/Evaluation Meeting Accra (incl. HAFL Collaborators)	10,000	10,000
33	61	Steering committee meeting (local transportation, etc) Local Transport Costs	5,000	5,000
	33.1	Vehicle Hire/Transportation	6,900	6,900
	33.2	Fuel	9,600	9,600
39		Component Total	72,210	72,210
40		CAPITAL ITEMS		
44		Capital equipment		
	44.1	Computer Equipment		
	44.1.1	1 Laptop Computer (Research)		-
	44.1.2	2 Desk Top Computer and Accessories (FORIG and REDD Secretariat)	2500	2,500
	44.1.3	2 Printers (FORIG and REDD Secretariat)	1000	1,000
	44.2	Forestry Equipment		
	44.2.1	2 Global Positioning System (GPS)	1000	1,000
49		Component Total	4,500	4,500
50		CONSUMABLES		
51		Publications		
	51.1	Layout and printing of documents	4,500	4,500
	51.2	Dissemination of Publications	1,500	1,500
52		Office Supplies		
	52.1	Stationery, utilities and other supplies	2,000	2,000
	52.2	Contribution Secretariat HAFL	2,000	2,000
	52.3	Contribution Secretariat, FORIG/FC	5,000	5,000
	52.4	Contribution to office maintenance	2,400	2,400
	52.5	Office supplies Ex. Agency	2,000	2,000
53		Media		
	53.1	Public Awareness Support	1,000	1,000
59		Component Total	20,400	20,400
60		MISCELLANEOUS		
	61	Audit	2000	2,000
	62	Contingency		0
69		Component Total	2,000	2,000
70		NATIONAL MANAGEMENT COSTS / EXECUTING AGENCY MANAGEMENT		
		Executing Agency Management Cost (15% of overall project budget , 10 - 69)	43,949	43,949
80		PROJECT MONITORING AND ADMINISTRATION		
	81	ITTO Monitoring and Review	8000	8000
	82	ITTO Mid-Term Evaluation		

83	ITTO Ex-Post Evaluation		
	Sub-Total		
84	ITTO Program Support Costs	22,015	22,015
89	Component Total	30,015	30,015
100	GRAND TOTAL		366,954

3.4.2 ITTO Budget by Component (in U.S. Dollars)

Category	Description	Total	Year 1
10	Project Personnel		
11	National Experts		
11.1	Project Co-ordinator	4,200	4,200
11.2	2 National Experts (Climate change and REDD)	12,000	12,000
11.3	National Expert (Inventory and Ecology)	7,000	7,000
11.4	National Expert (Forestry)	6,000	6,000
11.5	National Expert (Socio-Economist)	5,000	5,000
11.6	National Expert (Agroforester)	5,000	5,000
12	Research Assistants		
12.1	Research Assistant (Climate change and REDD)	6,000	6,000
12.2	Research Assistant (Inventory and Ecology)	2,000	2,000
12.3	National Research Assistants (MSc)	750	750
12.4	Research Assistant (Forestry)		
12.5	Research Assistant (Socio-economist)	3,000	3,000
12.6	Research Assistant (Agroforester)	3,000	3,000
12.7	Research Assistant (Coordination of publications)	5,000	5,000
12.8	Administrative staff	1,800	1,800
12.9	National Research Associate	5,750	5,750
12.91	National Senior Consultant	7,000	7,000
12.92	Community Staff	980	980
13	International Consultants (HAFL)		
13.1	Senior Forestry Consultant	17,500	17,500
13.2	Senior Agricultural Consultant	7,000	7,000
13.3	Research Manager, HAFL	33,000	33,000
13.4	Project Mentoring/Supervision		
14	Fellowships and Training		
14.1	Training (MSc)	28,200	28,200
15	Workshops		
15.1	2 Workshops (Verification and Project Completion)	12,600	12,600
15.2	Capacity building/training workshop for community groups	6,300	6,300
15.3	Scientific Advisor	1,000	1,000
19	Component total	180,080	180,080
30	TRAVEL		
31	Daily Subsistence Allowance		
31.1	National Experts and Assistants	12,750	12,750
31.2	International Consultants	10,000	10,000
31.3	Others (Research Assistants)	800	800

32	31.4	Driver International Travel	2,160	2,160
	32.1	International Consultants	12,000	12,000
	32.2	Communication and Visa Costs	3,000	3,000
33	32.3	Travel costs for two (2) HAFL Collaborators (Steering/Evaluation meeting, Accra) Local Transport Costs	10,000	10,000
	33.1	Vehicle Hire/Transportation	6,900	6,900
	33.2	Fuel	9,600	9,600
39		Component total	67,210	67,210
40		CAPITAL ITEMS		
44		Capital equipment		
	44.1	Computer Equipment		
	44.1.1	1 Laptop Computers (Research)		-
	44.1.2	2 Desk Top Computer and Accessories (FORIG and REDD Secretariat)	2,500	2,500
	44.1.3	2 Printers (FORIG and REDD Secretariat)	1,000	1,000
	44.2	Forestry Equipment		
	44.2.1	2 Global Positioning System (GPS)	1,000	1,000
49		Component Total	4,500	4,500
50		CONSUMABLES		
51		Publications		
	51.1	Layout and printing of documents	4,500	4,500
	51.2	Dissemination of Publications	1,500	1,500
52		Office Supplies		
	52.1	Stationery and other supplies	2,000	2,000
	52.2	Contribution to office maintenance	2,400	2,400
	52.3	Contribution HAFL Secretariat	2,000	2,000
53		Media		
	53.1	Public Awareness Support	1,000	1,000
59		Component Total	13,400	13,400
60		MISCELLANEOUS		
	61	Audit	2,000	2,000
	62	Contingency		
69		Component total	2,000	2,000
70		NATIONAL MANAGEMENT COSTS / EXECUTING AGENCY MANAGEMENT		
		Executing Agency Management Costs	see executing agency budget	
80		PROJECT MONITORING AND ADMINISTRATION		
	81	ITTO Monitoring and Review	8000	8000
	82	ITTO Mid-Term Evaluation		
	83	ITTO Ex-Post Evaluation		
		Sub-Total		

84	ITTO Program Support Costs (8% on Items 10 - 82 above)	22,015	22,015
89	Sub-Total	30,015	30,015
100	GRAND TOTAL	297,205	297,205

3.4.3 Executing Agency Budget by Component (in U.S. Dollars) Project budget by source - Executing Agency/Host Government

Category	Description	Total	Year 1
10	Project Personnel		
11	Project Co-ordinator	1,800	1,800
12	5 National Researchers/Experts	6,000	6,000
13	6 Research Assistants	5,400	5,400
14	Administrative staff	600	600
19	Component total	13,800	13,800
40	Capital items		
41	Premises (Contribution to secretariat in FORIG and the FC, Ghana)	5,000	5,000
49	Component total	5,000	5,000
50	Consumables		
51	Office supplies, utilities and other supplies	2,000	2,000
59	Component total	2,000	2,000
60	Miscellaneous		
61	Steering committee meeting	5,000	5,000
69	Component total	5,000	5,000
70	Executing Agency Management cost	43,949	43,949
GRAND TOTAL		69,749	69,749

ITTO BUDGET TO COLLABORATING INSTITUTIONS

A. SWISS GOVERNMENT (HAFL SECRETARIAT)

Description	Activity	Quantity	Unit	Unit Cost (\$)	Total Cost (\$)
Senior Forest Consultant	4.2	35	days	500	17,500
Senior Agricultural Consultant	4.1	14	days	500	7,000
Research Manager HAFL	4.1/4.2/all	12	months	2,750	33,000
Development of pilots/MSc training	1.4 (MSc)	3	lump sum	9,400	28,200
International Travel Senior Consultants	4.1/4.2	4	Air ticket	3,000	12,000
DSA, local travel costs in Ghana	4.1/4.2	40	days	250	10,000
Communication and visa costs		6	lump sum	500	3,000
Secretariat			lump sum	2,000	2,000
Total					112,700

B. GOVERNMENT OF GHANA (FORESTRY RESEARCH INSTITUTE OF GHANA)

Description	Activity	Quantity	Unit	Unit Cost (\$)	Total Cost (\$)
Project Personnel					
National Experts (Researchers)					
Project Co-ordinator	All	12	months	350	4,200
National Experts (Climate Change and REDD)	1.1/1.2	12	days	1000	12,000
National Expert (Inventory and Ecology)	1.3	7	days	1000	7,000

National Expert (Forestry)	2.1	12	days	500	6,000
National Expert (Socio-Economist)	2.2	5	days	1000	5,000
National Expert (Agroforester)	2.3	5	days	1000	5,000
Research Assistants					
Research Assistant (Climate change and REDD)	1.1/1.2	30	days	200	6,000
Research Assistant (Inventory and Ecology)	1.3	10	days	200	2,000
National Research Assistants (MSc)	1.4	3	months	250	750
Research Assistant (Forestry)	2.1				
Research Assistant (Socio-economist)	2.2	15	days	200	3,000
Research Assistant (Agroforester)	2.3	15	days	200	3,000
Research Assistant (Coordination of publications)	3.3	10	days	500	5,000
National Senior Consultant	4.2/4.4	14	days	500	7,000
National Research Associate	4.1/4.2/4.4	23	days	250	5,750
Administrative Staff	All	12	months	150	1,800
Community Staff	3.1/2, 4.3	14	days	70	980
Project Mentoring/Supervision					
Subtotal					74,480
Workshops					
2 Workshops (Verification and Project Completion)	3.1, 3.2		lump sum		12,600
Capacity building/training workshop for community groups	4.3		lump sum		6,300
Scientific Advisor	3.1,3.2	4	lump sum	250	1,000
Subtotal					19,900
TRAVEL					
Daily Subsistence Allowance					
National Experts and Assistants					12,750
Others (Workshop)					800
Driver					2,160
Local Transport Costs					
Local Travel costs for Steering/Evaluation meeting (incl. HAFL)					10,000
Vehicle Hire/Transportation					6,900
Fuel					9,600
Subtotal					42,210
CAPITAL ITEMS					
Capital equipment					
Computer Equipment					
1 Laptop Computer (Research)					-
2 Desk Top Computer and Accessories (FORIG and REDD Secretariat)					2,500
2 Printers (FORIG and REDD Secretariat)					1,000
Forestry Equipment					
2 Global Positioning System (GPS)					1,000
Subtotal					4,500
CONSUMABLES					
Publications					
Layout and printing of documents					4,500
Dissemination of Publications					

					1,500
Office Supplies					
Stationery and other supplies					2,000
Contribution to office maintenance					2,400
Media					
Public Awareness Support					1,000
Subtotal					11,400
MISCELLANEOUS					
Audit					2,000
Contingency					0
Subtotal					2,000
GRAND TOTAL A + B					267,190

3.5 ASSUMPTIONS, RISKS, SUSTAINABILITY

3.5.1 Assumptions and risks

The project is part of the R-PP process – a national strategy that has been developed in close collaboration with all interested stakeholders and development partners in Ghana in order to minimize risks and to avoid unbearable trade-offs. Broad consultations and the implementation of a full social and strategic safeguard process have been conducted prior to the approval of the R-PP, taking into consideration experiences with the VPA.

The main remaining risk is the uncertainty at the international level on the feasibility of the introduction of an implementable REDD+ strategy for the countries and the insecurity in respect to the further development of the World's carbon market. However, even if the implementation of the R-PP is delayed, or the decision on REDD+ being a market instrument will not be taken at UNFCCC, the project is fully in line with low carbon strategies and brings additional other benefits for poverty alleviation.

On the national level, coordination among the different initiatives in the field of climate change and mitigation can become an issue. Yet the responsibility for coordination is clearly assigned to ENRAC, which has access to information of the committees overseeing particular programmes. The political will that is addressed as a potential risk by the GFIP is not a direct issue in this project, as the work to be done under REDDES could on the contrary be an instrument to encourage measures. In the long-run, the political processes that should support the implementation of sustainable land-use practices are a challenge to the existing projects. However, pilots will be geared at practical solutions in the field and therefore less dependent on long-run political processes regarding REDD+.

This project is also aimed at minimizing the risk of “resistance to change” that exists for larger projects as the complete REDD+ implementation and the FIP in that it launches studies that make the experiences and knowledge of local people available for the implementation of the mentioned programmes.

In addition, a risk that is mentioned in the RPP is that different expectations with respect to the benefits and risks associated with REDD+ could exist among stakeholders within and outside of the Government. As REDDES has not the aim to implement REDD+, but to assess potential challenges of REDD+ implementation, the risk does not apply here.

Finally, it is assumed that there is enough support among local authorities and communities for the collaboration with national and international researchers, as concrete projects are proposed. Research plans are discussed with national and local authorities so that the undertakings are in line with local requirements.

3.5.2 Sustainability

This project is based on needs assessed during the implementation of the REDD+ Readiness Preparations. It is clearly linked to a main phase, where the support of pilot projects under the REDD+ framework will concretely be implemented (**technical sustainability**). In putting a focus both on technical as well as institutional issues, it acknowledges the challenges arising from establishing the new framework for REDD+.

Institutional sustainability is achieved through the project execution by the National REDD+ Secretariat which reports to the Forestry Commission. FORIG on the implementation level can directly feed the experiences into the R-PP process.

In focussing on the development of means to select the most adequate carbon schemes, forest-dependent communities shall be enabled to benefit from alternative sources of livelihoods, which are one of the reasons for deforestation and forest degradation. Supporting the country in its preparation of instruments for the management of carbon certificates is one of the objectives of the project, in view of an enhancement of opportunities in non-traditional export sectors.

Approaches for poverty alleviation necessarily have to take into account different needs that may exist between genders and social groups of the population. Different interests shall be discussed in transparency so that the best possible long-term solution can be found.

Political sustainability will be achieved through the alignment with national policies. The implementation of REDD+ is one of Ghana's NAMAs (see section 1.2.1)

4 PART 4: IMPLEMENTATION ARRANGEMENTS

4.1 Organization, structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

The project will be executed through International Tropical Timber Organisation (ITTO), who administers the funds for the project from the Trust Fund of SECO, and reports to the latter. The ITTO will contract the partners, FORIG and HAFL, for the implementation and delivery.

The REDD+ Secretariat Ghana which is responsible for the R-PP will lead and coordinate the REDDES project. Located in the Ministry of Lands and Natural Resources, the REDD+ Secretariat is the Implementing Agency which reports to ITTO. For this purpose, it denominates a project focal point within the REDD+ Secretariat.

The Forestry Research Institute of Ghana (FORIG) will be under contract from ITTO in order to execute the activities. It will denominate a project coordinator. In addition, it will provide expertise and necessary logistics for the project. Also under contract from ITTO, the Swiss School of Agricultural, Forest and Food Sciences (HAFL) will, in close coordination with FORIG conduct the work mainly for outputs 1 and 4.

FORIG and HAFL will work closely together to implement the REDDES project activities. The work will be coordinated by the REDD+ Secretariat, based on a work plan that will be prepared by FORIG and HAFL and endorsed by the REDD+ Secretariat in a first meeting in fall 2012. A mid-term review of implementation will be done in January 2013 and a final review of the work plan will be done in mid-2013.

FORIG and HAFL will establish close working relationships with SECO projects in Ghana, in particular with CRIG related cocoa program and with the IUCN implemented Allanblackia project.

The figure below shows the institutional relationships of the project. The REDD+ Secretariat under the Ministry of Lands and Forests will coordinate the work of the present REDDES programme and assure that the outcomes will serve the purpose of the Readiness Preparation Proposal Implementation (see 3.2).

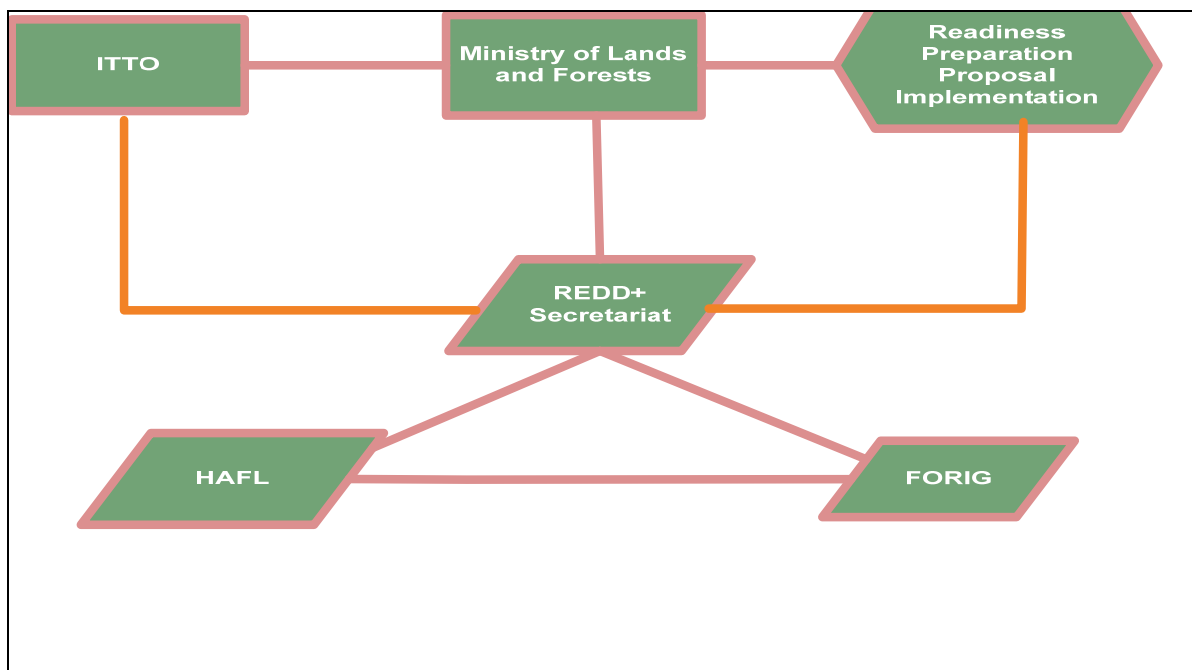


Figure 2: Organizational structure

Responsibilities

ITTO:

- Supervising the project
- Prepare and conclude contractual arrangements with the REDD+ Secretariat, FORIG and HAFL

National REDD+ Secretariat of Ghana: Implementing Agency

- Will nominate a project focal point responsible for liaisons REDDES/R-PP
- Develops the main project proposal of SECO in collaboration with HAFL and FORIG
- Has the lead for the ITTO online monitoring system (OLMS) completion
- Collaborate with others to ensure smooth running of the project, especially regarding the REDD+ strategy formulation
- Ensure avoidance of duplication with other projects in the REDD+ area
- Proof-read writing of all publications including scientific papers

FORIG:

- Responsible for technical delivery (according to the activities) jointly with HAFL and in strong liaison with Ghanaian researchers
- Will appoint project coordinator that oversees the implementation of the REDDES project
- Provide expertise (for all internal and external consultants and researchers)
- Provide logistics for all activities, incl. Workshop preparation
- Provide technical input to the preparation of research
- Responsible for reporting to ITTO and SECO
- Liaise with local communities to ensure effective participation
- Engage in stakeholder involvement

HAFL:

- Responsible for technical delivery of project jointly with FORIG
- Jointly defines with the REDD+ Secretariat the main project proposal for SECO
- Implement applied research in the denominated areas
- Jointly with FORIG delivers training sessions as requested by the REDD+ Secretariat
- Provide technical input for researches and capacity building
- Denominate a project focal point

4.1.2 Project management team

Key project staff at FORIG and their responsibilities will be:

EDUCATION:	Dr. Victor K. Agyeman LLB (2010), Ph.D. 1994 (Forestry), University of Aberdeen, U.K.; M.Phil. 1990 (Forest Management), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; B.Sc. 1985 (B.Sc. Natural Resources Management), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
CAREER/EXPERIENCE:	Director, Forestry Research Institute of Ghana (2007 – to date); Principal Research Scientist, FORIG (2007 to date); Senior Research Scientist, (1996 – 2006); Research Scientist (1990 – 1996)
RELEVANT WORK DONE:	Project leader, ITTO PD 4/98 Rev. 1 (F), ITTO PD 32/98

TASKS AND RESPONSIBILITIES ON THE PROJECT:	<p>Rev. 1 (F), PPD 63/02 Rev. 1(I); Project leader, Community Forest Management Project (2001 – 2009) funded by the African Development Bank</p> <p>Responsible for the execution and coordination of all aspects of the project; collation of project reports for all participating Scientists and institutions. He will also take charge of all forestry and ecological, governance and legal aspects of the project.</p>
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NAME	: Boateng Kyereh
DATE & PLACE OF BIRTH	: 28 December 1960, Berekum, Ghana.
EDUCATION	: PhD (Tropical Forestry) 1994. University of Aberdeen, U.K.; M.Sc. (Environmental Forestry) 1989. University College of North Wales, Bangor, U.K.; B.Sc. (Hons) Natural Resources Management, 1986. Institute of Renewable Natural Resources, University of Science & Technology, Kumasi, Ghana.
CAREER/EXPERIENCE	: Lecturer (1990–2004), Senior lecturer (2004 to date) Kwame Nkrumah University of Science & Technology, Kumasi, Ghana.
RELEVANT WORK DONE	: Coordinator for the Development of forest management plans for 14 Globally Significant Biodiversity Areas in Southern Ghana. Research Team leader of TROPENBOS Ghana Programme. Project team member for ITTO PD 32/98 Rev. 1 (F). Pre-project team leader, ITTO PPD108/04
TASKS AND RESPONSIBILITIES	UNDER PROPOSED PROJECT: Supervision of field activities, report writing and information dissemination. Team Leader for components of FORIG for Output 1

NAME:	4.1.2.1.1.1 Akwasi Duah-Gyamfi
EDUCATION:	M.Phil. 2007 (Silviculture and Forest Management), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; B.Sc. 2000 (B.Sc. Natural Resources Management), Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
CAREER/EXPERIENCE:	Research Scientist, FORIG (2008 to date); Asst. Research Officer (2003 – 2007)
RELEVANT WORK DONE:	Project Team member ITTO PD 4/98 Rev. 1 (F), PPD 63/02 Rev. 1(I)
TASKS AND RESPONSIBILITIES ON THE PROJECT:	Responsible for delivery of Output 3

Dr. Rebecca Ashley Asare (Project Scientist, Social Ecologist), Team Leader for components of FORIG for Output 2

HAFL Assignment

The specialists of the HAFL will work closely with their colleagues in the Forest Research Institute of Ghana (FORIG) and the Secretariat REDDES in Ghana. The CVs of Key project staff at HAFL and their responsibilities will be:

NAME:	Prof. Dr. Jürgen Blaser
EDUCATION:	Ph.D. 1987 (Forestry), Ernst-August University, Göttingen, Germany (Forest Ecology, Growth dynamics and silviculture of mountain oak forests in Costa Rica); Post-Graduat. 1982, Ernst-August University, Göttingen, Germany (Ecology and dynamics of young secondary forests in Venezuela); M.Sc. Forest Engineer, 1981, Swiss Federal Institute of Technology, Zurich, Switzerland
CAREER/EXPERIENCE:	Professor/Senior Lecturer for International Forestry and Climate Change, Bern University of Applied Sciences – School of Agricultural, Forest and Food Sciences (2011 to date); Global Advisor on Forests and Climate Change, Swiss Development Cooperation SDC (2010 to date); Deputy Director and Head of the Forestry and Environment Team, Helvetas Swiss Intercooperation (2002-2009); Senior Forester, The World Bank, Environment and Rural Development Department, Washington D.C., USA (1997-2001); Programme Manager; Deputy Head of the Forestry Sector, Intercooperation, Swiss Organization for Development and Cooperation (1991-1997), (selection)
RELEVANT WORK DONE:	Consultant, Review of Forest Policy (2012), FAO; Consultant for the development of policy guidelines for forest restoration, ITTO (2001); Co-Chair of the Expert Team of the Forest Investment Programme REDD+ of the Multilateral Dev. Banks, Member of the Technical Advisor Group of the Global Environmental Facility (GEF), Associated Professor and Chief Technical Advisor, forestry School, Antananarivo, Madagascar (1987-1991), (selection)
TASKS AND RESPONSIBILITIES ON THE PROJECT:	Responsible for the execution of the project activities assigned to HAFL; preparation of the main project output (project proposal to support the RPP process of Ghana); responsible for technical delivery of project jointly with FORIG; implementation of studies and scientific supervision of the studies on pilots; technical input and capacity building.

NAME:	Prof. Dr. Urs C. Scheidegger
EDUCATION:	Ph.D., 1983 (Agronomy), Swiss Federal Institute of Technology, Zurich, Switzerland (Photosynthesis and utilization of photosynthates in ecotypes of whit clover); Dipl. Ing. Agr. ETH, 1977, Swiss Federal Institute of Technology, Zurich, Switzerland
CAREER/EXPERIENCE:	Professor for tropical crop production, Bern University of Applied

<p>RELEVANT WORK DONE:</p> <p>TASKS AND RESPONSIBILITIES ON THE PROJECT:</p>	<p>Sciences – School of Agricultural, Forest and Food Sciences (1993 to date), since 2010 Head of Master Program Division; regional coordinator and team leader for the Centro Internacional de Agricultura Tropical (CIAT, Cali, Colombia) in the Great Lakes Region of Africa; Senior Scientist at the Centro Internacional de la Papa (CIP, Lima, Peru), Post-doctoral fellow at the Centro Internacional de la Papa (CIP, Lima, Peru); (selection)</p> <p>Numerous consultancies for the Swiss Development Cooperation Agency on small-scale agriculture, agroforestry, farmer participatory research in various tropical countries; Mission leader external review of Red SICTA (Agricultural Innovation Network in Central America), Consultancy for Helvetas in the Renewable Natural Resources Research System support program, Bhutan; lecturer for tropical crop production at the Swiss Federal Institute of Technology, Zurich, Switzerland, (selection)</p> <p>Technical and scientific support for the implementation of Output 4 of the project, especially in analyzing agroforest systems in view of REDD+ pilots; support for the preparation of the main project output (project proposal to support the RPP process of Ghana); technical input and capacity building.</p>
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<p>NAME:</p> <p>EDUCATION:</p> <p>CAREER/EXPERIENCE:</p> <p>RELEVANT WORK DONE:</p> <p>TASKS AND RESPONSIBILITIES ON THE PROJECT:</p>	<p>Angela Deppeler</p> <p>MA, 2003 (Social Anthropology, minors in Ecology and Economics), Universities of Basel and Bern, Switzerland; Certificate of Advanced Studies in Development and Cooperation, Swiss Federal Institute of Technology, Zurich, Switzerland; currently M.Sc. Student on Applied Agricultural and Forestry Sciences, specialization in Agriculture and Agroforestry in Transition, at the Bern University of Applied Sciences.</p> <p>Scientific Assistant International Forestry, at the Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences (Feb. 2012 to date); Project Manager International Cooperation of the Swiss Federal Office of Intellectual Property (2005-2011); Junior Assistant of the German Service of Development in Togo (2004-2005); Assistant/Scientific Collaborator at the Departments of America and Education of the Museum der Kulturen, Basel, Switzerland (2001-2004).</p> <p>Project management for intellectual property projects in collaboration with public and private stakeholders mainly in Vietnam, Ghana, Jamaica; evaluation study (organizational development) in an NGO in Togo; MA thesis study on the subsistence economy of Guarani people in the subtropical forest in Paraguay; NGO work and collaboration in student projects relating to Fair Trade, Indigenous Peoples, development politics.</p> <p>Research coordination at HAFL, support of the day-to-day work of the project, in particular the project design, the organization of the studies and the coordination with the REDD+ secretariat and FORIG in Ghana. Assurance of reporting to ITTO and the Ghanaian partners on HAFL work. Assistance for all matters of coordination of the REDDES project.</p>
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4.1.3 Project steering

According to ITTO procedures, a **Project Technical Committee** (PTC) will be installed. The composition of the PTC is

- A chairperson appointed by the Executing Agency,
- one representative of the ITTO,
- one representative of ENRAC/REDD Secretariat Accra,
- one representative of SECO/Swiss Government, as well as
- one representative of FORIG and
- one representative of HAFL
- one representative of relevant non-governmental organisations (NGOs)
- one representative of the Ministry of Lands and Natural Resources, Ghana
- Project coordinator, who shall be the secretary of the PTC.

Due to the short project cycle and the limited budget, the meetings shall be done by videoconference as far as possible. The meeting will take place at least once during the project cycle. It will be convened by the project manager of ITTO. One of the PTC members can also call for a meeting or videoconference; however consensus on its necessity must be agreed before among members.

The monitoring of performance will be the approval of the project proposal that is based on the outputs of this project part.

4.1.4 Stakeholder Involvement and Mechanisms

Stakeholders on governmental level will be involved through a consultation process led by FORIG. On the level of communities, all types of analytical work conducted at local level will prior be discussed and agreed upon with local stakeholders. The researchers' procedure will be to transparently inform local stakeholders and to make sure that knowledge gained will be shared. The outcomes of the project, and in particular the main output - the full project proposal that supports RPP implementation - will be largely consulted through the established consultation mechanism of the RPP. Collaboration with related projects/programmes will also be sought through established mechanisms at FORIG.

4.2 Reporting, review, monitoring and evaluation

(a) Project Progress Report

The project coordinator will be responsible for the preparation of a project process report at the completion of 6 months after the project start.

(b) Project Completion Report

The project coordinator will be responsible for the compilation of the project completion report and have it submitted to ITTO within three months of the project completion.

(c) Research Reports

Specific research reports with detailed findings will be prepared by the respective researchers and consultants and made available to ITTO before project completion. The results should also be available in workshop inputs for the presentation to stakeholders as well as in article form in order to share lessons learnt by this project with other actors in REDD.

(d) Monitoring, Review and Technical Committee

According to ITTO procedures, a **Project Technical Committee** (PTC) will be installed (see section 4.1.3). The progress of the project implementation will also be reported through the **ITTO online monitoring system** (OLMS). In addition, **self-evaluation** (at completion) for the project will be carried out. The internal monitoring will be led by one senior collaborator of ITTO, FORIG, HAFL and a representative of the Swiss Embassy. It can be done by video conferencing. For the final self-evaluation, the same team, under the guidance of the ITTO project officer responsible, will lead a discussion with the main collaborators to the project. The results of the self-evaluation will be used in fine-tuning the activities foreseen for the rest of the project cycle.

4.3 Dissemination and mainstreaming of project learning

Dissemination and mainstreaming of project results is assured through the capacity building components. The described pre-phase aims at providing essential information for the national REDD strategy for Ghana. **Analytical elements will be summarized and published and presented to the wider ITTO community.**

4.3.1 Disseminating of project results

The principal result of the REDDES project will be a main project document that supports the implementation of the RPP. The Results of the project will be disseminated as follows

- Sharing of the project results in established committees such as Forest Watch and Forest Forum
- Stakeholder workshops on study results
- Publication of study results in scientific journals, **and through the ITTO and FCPF**
- Media programmes such as radio talkshows will be used as a means of public education and sensitization on REDD+ issues. It will also be considered to use the dissemination systems of FIP and FCPF.

4.3.2 Mainstreaming of project learning

The results available after project completion should be integrated in the national REDD+ development process. This will be ensured through:

- the implication and direct execution of the project through the relevant Ghanaian agencies which are involved in the national policy processes such as FORIG
- the internal learning processes of these institutions
- the liaisons to ENRAC, **the Environment and Natural Resources Advisory Council on the Cabinet Level, which oversees the development of the REDD+ preparations for the GoG through the Technical Coordinating Committee**). Through the involvement of the FC Climate Change Unit in the project, the project learnings will be fed into national processes of REDD+ readiness preparation.

In addition, Ghana plays an active role in the international climate talks (UNFCCC) at technical and political levels and can provide a feedback in the context of elaborating a global REDD+ mechanism. Ghana is particularly well placed to exchange lessons learned through the readiness process with its neighboring countries, in particular Liberia, which has large forest areas. Examples of such collaborations exist already, such as Ghana's support to the formulation of Liberia's new reforestation policy and afforestation strategy supported by ITTO with SECO funding.

ANNEX 1. Contractual agreement for HAFL

Support Services by the Bern University for Applied Sciences - School for Agricultural, Forest and Food Sciences (HAFL)

The School of Agricultural, Forest and Food Sciences HAFL is part of Bern University of Applied Sciences. It is the Swiss centre of competence for education in rural development and offers three Bachelor's degree programmes in Agriculture, Forestry and Food Science & Management besides a Master's degree programme in Applied Agricultural and Forestry Sciences. The scientific staff of HAFL also conducts applied research work and renders advisory services to institutions in Switzerland and around the world. Through its research, HAFL develops solutions to meet the challenges of the agricultural, forest and food industries. The research projects are largely down-to-earth ('on-site research'), which allows for analyzing the context and complex operational interrelationships.

Assignment

A group of specialists of the HAFL will support the REDD+ readiness process of Ghana through targeted advisory work and applied research work in off-reserve land management systems. HAFL will thus contribute to create knowledge and capacities to combine agricultural and tropical forest production systems with climate change mitigation measures that potentially help Ghana achieving future emission reduction targets and/or enable the country to respond to demands of a possible future carbon market.

This assignment has its origin in a Financing Request by the Ghanaian authorities to the Swiss Government (SECO), in close cooperation with ITTO and the FCPF to support the process of the Readiness Preparation Proposal (RPP) of Ghana. The HAFL Expertise and consultancy services are requested in the following areas:

- Develop a full project support element on off-reserve pilots and capacity building in FCPF supported RPP process of Ghana
- Undertake some targeted analytical work to develop adequate long-term pilots for the readiness process
- Support additional analytical work of National Expert Consultations and Working Groups as coordinated with the REDD Focal Point in Ghana
- Support capacity building work for off-reserve forest carbon management, as coordinated with FORIG.

Based on the work programme defined in the current REDDES proposal, the following specific objectives have been defined in the REDDES project plan:

- Preparation of a bilateral project document to be submitted to SECO to support Ghana's public sector in the implementation of pilot projects and concrete concepts for the implementation of the national REDD+ strategy, including the institutional setting of the project.
- Analysis of possible pilots for REDD+ activities in agricultural and secondary forest systems; this work will be partially done by MSc Master students (in tandem by 3 from HAFL and 3 from Ghana/FORIG) in the following working areas:
 - a. Agro-forestry production systems with enhanced carbon sequestration potential
 - b. Cost-benefit analysis along the value chain of different wood products and carbon potential
 - c. Fair trade labeling of Cacao: impact regarding small-scale farmers under specific consideration of sustainable carbon management.
- Coordination with other institutions in the R-PP and FCPF implementation process in all aspects of capacity building and structured analytical work in the REDD readiness process.

Work Approach:

- 1) *Main output.* SECO bilateral Project proposal to support the RPP process of Ghana: The preparation of a main project will be organized in close cooperation between senior experts in the field of forestry and agriculture from Ghana and Switzerland, coordinated by the Senior Forest Consultant of HAFL. This work will be done in close coordination with the Ghana REDD office and FCPF partners in Ghana. The project will be integrated as one of the core components of the Ghana RPP.
- 2) *Additional output.* Studies on pilots (MSc studies): The studies consist of desk research and targeted field work in Ghana. The field research to be carried out in Ghana will be planned in collaboration with FORIG in order to find the most appropriate research design and produce adequate results. Experienced professors from Ghana and HAFL will monitor the studies.
- 3) *Working modalities within HAF:* a research coordinator will support the day-to-day work of the project, in particular the development of the project design, the organization of the studies and the coordination with the REDD+ Secretariat and FORIG in Ghana. She will also assure reporting to ITTO and the Ghanaian partners on HAFL work. She will assist the joint HAFL/FORIG team in all aspects of coordination of the REDDES project
- 4) *Timeframe:* According to working plan in project description: 1 December 2012 – 30 November 2013. Reporting: The project design will be delivered in July 2013, whereas the final versions of the studies on pilots will be delivered until latest July 2014.

ANNEX 2. Contractual agreement ITTO-FORIG

The Forestry Research Institute of Ghana is one of the 13 institutes of the Council for Scientific and Industrial Research (CSIR). It is located at Fumesua near Kumasi in the Ashanti Region of Ghana. It started as a research unit within the Forestry Department in 1962. It was fully established as a research institute and named FOREST PRODUCTS RESEARCH INSTITUTE (FPRI) under the then Ghana Academy of Sciences in 1964 and in 1968 placed under the Council for Scientific and Industrial Research (CSIR). By Act of Parliament (Act 405) the Institute was transferred from the CSIR to the Forestry Commission in 1980. In 1991, the name of the Institute was changed to Forestry Research Institute of Ghana to reflect the widening scope of its research activities. In 1993, by another Act of Parliament (Act 453) the Institute was reverted to the CSIR.

The goals of FORIG are:

- Conduct user-focused research commissioned by its client
- Generate and disseminate useful scientific and appropriate technological information directly to its clients, stakeholders and the general public in a timely manner.
- Anticipate and address the major research information needs that are likely to face managers, policy makers, and stakeholders in the future, (i.e. develop capacity for quick response to changing circumstances)
- Enhance its institutional capability through appropriate training programmes to address technical problems in forestry resources protection, sustainable management, and utilization.
- Contribute, through research to the social, economic and environmental well-being of the people of Ghana
- Enhance the sustainable management, conservation and efficient utilization of Ghana's forest resources
- Foster strong linkages, through collaborative research across disciplines among forestry professional, stakeholders and external institutions.

FORIG has the following objectives:

- Develop technologies for sustainable management of natural forests and biodiversity conservation
- Develop technologies fundamental to the success of plantation forestry. Generate technological properties and develop appropriate processing techniques for the efficient utilization of Ghana's forest resources
- Enhance sustainable management and utilization of non-timber forest products (NTFPs)
- Mobilize, process and disseminate information critical to the management of Ghana's forest resources
- Strengthen capacity and use it for optimum research and commercialized services
- Establish mechanism for attracting financial assistance from donors, private and public institutions for research

Expertise: The Institute has specialists in Silviculture, Entomology, Forest botany, Forest ecology, Seed technology, Mensuration / Statistics, Genetics, Agro-forestry, Socio-Economics and Marketing and Information Science, GIS and Remote Sensing.

Staff Strength: The Institute has total staff strength of 278 made up of 47 senior members 17 who have Ph.D degrees and the remaining with M.Sc degrees and 61 non-research senior officers.

Facilities:

The Institute's permanent offices and laboratories are located at Fumesua, near Kumasi. It has research centres at Bobiri and Amantia both in the Moist, Semi-Deciduous Forest Zone, Benso in the Wet Evergreen Zone, and Bolgatanga in the Savannah zone. There are also research stations

at Subri, Afram Headwaters, Pra-Anum, Accra plains, Northern grassland, Bia Tano and Asenanyo.

Externally Funded Projects

FORIG has won a number of competitive grants/donor supports for a wide variety of projects. Currently, there are over 10 donor-funded projects. These are in the areas of forest management, wood utilization and construction, silviculture and management and entomology.

Donors/sponsors are varied and range from bilateral support through to researcher support. Our donors include ITTO, DFID, AAS and the European Union. Below is the list of some on-going donor sponsored projects:

- Silviculture and Economics of Improved Natural Forest Management in Ghana
- Processing and Utilization of Logging Residues through Collaboration with Local Communities and Forest Industries
- Development of an Integrated Strategy for Reduction of Shoot Borer Impact on African Mahogany in the Tropical Humid Forest of Africa
- Increasing Productivity and Quality of West African Teak Plantations using Genetic Diversity and Sustainable Management
- Rehabilitation of Mined Sites
- Rehabilitation of Degraded Forests in the Savanna
- Rehabilitation of Degraded Forests through Collaboration with Local Communities
- Sustainable Development of Bamboo Resources in Ghana and Togo (AFORNET)
- Genetic Improvement, Productivity and Biodiversity Conservation of *T. scleroxylon* (AFORNET)
- Flower induction and mass productivity and biodiversity of *T. scleroxylon* using tissue culture (TWAS)
- Alternative mixed plantation systems and restoration strategies for conservation and sustainable production of timber species in Ghana (ITTO)
- Silvicultural strategies for mitigating shootborer impact on African Mahogany; Effect of pruning and companion planting (IFS)

Responding to the challenges and demands of national and global trends FORIG is an active member of prestigious international associations such as Commonwealth Forestry Association, International Union of Forestry Research Organizations (IUFRO) and International Union for the Conservation of Nature (IUCN).

Assignment

FORIG will be involved in the implementation of all the four (4) components of the project. First of all FORIG will be the lead agency in the implementation of Output 1, which covers the “**Analysis of possible pilots for REDD+ activities**”. This Output will be achieved by (i) Classifying a set of potential REDD project types (ii) Developing a set of criteria for ‘successful’ REDD projects (iii) Selecting high potential project types and (iv) Undertaking analytical studies for the development of pilots

FORIG will also ensure the implementation of Output 2 of the project, namely “**Identification of effective REDD+ implementation mechanisms in management and governance**”. FORIG will (i) Undertake an impact study of REDD+ implementation on local people (ii) Develop access & benefit sharing mechanisms and (iii) Develop incentive mechanisms for sustainable land use practices.

Output 3 of the project covers “**Capacity Building in view of improving institutional capacity for resource management and enforcement of regulatory policies**”. FORIG will again ensure the implementation of the activities under Output 3 by (i) Promoting capacity building for community groups about the potential of forest/tree protection (ii) Holding workshops for the sharing of results and conclusions of studies

FORIG will work with HAFL in the implementation of Output 4, which is titled “**Design of a main implementation project for piloting REDD+**”. The main activity of FORIG under Output 4 will be supporting HAFL to define the further role of ITTO in implementing the pilots in the RPP in Ghana.

ANNEX 3. Contact persons in Ghana

- Victor Agyeman, FORIG
- Robert Bamfo of the REDD Secretariat
- Oppon Sasu, ITTO Country Representative
- Joseph Appiah of the Forestry Commission,
- Rebecca Ashley Asare of the Forest Trends office in Ghana, who collaborates with FORIG on REDD project formulation and management
- Boateng Kyereh of the Kwame Nkrumah University of Science and Technology

ANNEX 4: Responses to reviewer comments

Reviewer Comment*	Amendment(s) made	Page #
<p>Comment 1: <i>Origin: Quite general. The section lacks explanation about the specific idea of this project. It explains the process in Ghana and it also explains the strategic partnership between a Ghanaian and a Swiss organization, however it lacks to clarify the origin of the idea of this specific project: What is the gap in the Readiness Preparation Process that is fulfilled through this project? What was missing in the R-PP and why it is important for making Ghana ready for a full participation in a REDD+ mechanism?</i></p>	<p>Section 1.1 (Origin) has been modified with more background explanation about the specific idea for the project. The project lays the foundation for the effective utilization of the three main funding sources for the implementation of the R-PP. It outlines the reasons for an analytical study prior to the implementation of the R-PP. It also complements the structured effort of the Ghana Government and its development partners in implementing the Readiness Preparation Process.</p>	<p><i>Page 4.</i></p>
<p>Comment 2: <i>There is no analysis of the conformity with the ITTO objectives or with ITTA 2006.</i> <i>Further in the Page 4 of the proposal states: The present REDDES project, as a preparation phase of the SECO project, will therefore focus on a basis to work out viable agricultural production schemes that could combine poverty alleviation and low carbon strategies and create opportunities for additional income through the optimization of production schemes including carbon. There are two questions in this case:</i> <i>1. Is ITTO the proper organization for funding the development of a proposal on "work out viable agricultural production schemes that could combine poverty alleviation and low carbon schemes...."? 2. Focus on agricultural activities can become a strategy for reducing deforestation and forest degradation, however promotion of agricultural activities is not included in the REDDES TP</i></p>	<p>Section 1.2.2 on the project's conformity with ITTO objectives and priorities as well as conformity with ITTA objectives of 2006 has been included.</p> <p>The project is in conformity with the ITTO objectives clauses c, f, j, l and m; and in agreement with the ITTA 2006, as the project bundles a number of analysis aiming at enhancing capacities in Ghana in the sustainable management of forests, as well as in their management and governance.</p> <p>The focus of the REDDES project in Section 1.2.1 (relevance to the submitting country's policies) was modified. The present REDDES project, as a preparation phase of a main Ghanaian-Swiss project supported by SECO project, will focus on a basis to work out viable off-reserve and agroforests production schemes that could combine poverty alleviation and low carbon strategies and finally create opportunities for additional income through the optimisation of production schemes including carbon certificates.</p>	<p>Page 7.</p> <p>Page 6.</p>
<p>Comment 3: <i>Page 4: The objective of REDDES is wrongly quoted. There is no mention to the TP priorities, not to the deliverables, nor to the means of verification in the Monitoring Protocol</i></p>	<p>The objective of REDDES was quoted correctly in section 1.2.3 (the project's synergies with the national ITTO programme); and references have been made to thematic programme priorities. REDDES seeks to reduce deforestation and forest degradation through the expansion of sustainably managed areas which also includes restoration of degraded secondary forests and rehabilitation of</p>	<p>Pages 7 and 8.</p>

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	<p>degraded forest lands, thereby complementing other international initiatives as REDD. The priorities of the thematic programme are I. Assessment and diagnosis, II. Enabling conditions and Capacity Building, III. Demonstration activities and IV. Scaling up and dissemination.</p> <p>The present project would focus mainly on priorities I and III by closing gaps through analytical works and preparing the basis for the implementation of pilot projects with the goal to introduce low-carbon development schemes.</p>	
<p>Comment 4: <i>As the text has been structured it is not possible to distinguish what are the priorities in the national forest policy and programs and what are the issues in the Readiness Preparation Process. Even if there is a 100% overlapping it would be useful to present the different elements of the Forest Policy and the REDD Readiness Preparation Process, the overlapping and the areas/topics, where there is no overlapping. Furthermore if there is a (potential) clash with other sectoral policies (e.g. agriculture), these should be presented here. The NAMA from Ghana includes the following sectors: energy (electricity, transport, residential, industrial, liquid and gaseous fuels), industrial processes (metal production), agriculture (crop production), LULUCF (forestry) and waste (solid waste disposal and waste water handling). Regarding forestry the NAMAs includes land conversions and degraded forest lands. REDD+ is mentioned as one of the many mechanisms, but without mentioning a special preference over the other mechanisms. If mentioning the NAMA in the proposal it would be good to clarify the link between this proposal and the activities Ghana is proposed to implement/is implementing regarding the NAMA.</i></p> <p><i>There are some interesting synergies that were not mentioned in the proposal (e.g. the ongoing activities with the UN-REDD, after its Board has agreed last December to Ghana's request to participate in the UN-REDD program or the SECO funded activities in organic cocoa)</i></p>	<p>In section 1.2.1 (relevance to the submitting country's policies) the priorities in the national forest policy and issues in the Readiness Preparation Process was separated.</p> <p>But the preparation of the R-PP was done in tandem with the development of the draft Forest and wildlife policy. The draft forest and wildlife policy provides the broad framework for the implementation of the R-PP. In addition, both documents: (1) emphasize that the forest and wildlife sector will have to find new ways to halt, and reverse the pace of deforestation and forest degradation in Ghana, (2) lay the broad framework for the effective management and protection of both the remaining permanent estate of forest and wildlife reserves within and outside forest reserves, and (3) emphasize the social, cultural, ecological and economic management of natural resources in the country.</p> <p>In section 1.2.1 (relevance to the submitting country's policies) the linkage between the proposal and activities Ghana is implementing or proposed to implement was clarified. The project is in line with Ghana's National Appropriate Mitigation Actions (NAMA), defined in 2010 according to the Bali Roadmap as a submission to UNFCCC. Ghana mentions land use, land-use change and forestry (LULUCF) as one focus of the NAMA. Within the LULUCF sector, Ghana wants to tackle the high decline in natural forest estates (land conversions) and the low rate of rehabilitation of degraded forest lands. Several strategies are listed in the NAMA to</p>	<p>Page 6.</p> <p>Page 6.</p>

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	address these problems, among them the promotion of sustainable forest management as well as the implementation of REDD+. This proposal is therefore perfectly in line with Ghana's internal policies, as it is defining concrete measures how to implement the NAMA, which are the broader guiding framework on the policy level.	
<p>Comment 5: <i>The proposal covers Ghana's high forest area as well as the so called transitional area. The proposal states that specific areas will be chosen during the REDDES implementation</i></p>	<p>More explanation was included in Section 1.3.1 (Geographic location) on selection of specific locations for project implementation. For the implementation of the main project, specific areas will be chosen out of the three forest zones classified in Ghana as high forest zone, transitional zone, and savannah zone. Abatement curves predicated on net (discounted REDD benefit only) benefits per tCO₂e sequestered and stored and the total potential CO₂e sequestered, over a 20 year period, indicate that, although biomass density is greater in the high forest zone, opportunities for biome-based carbon sequestration and storage can be found in all regions in Ghana. Nevertheless, the Brong Ahafo, Western and Northern Regions stand out as the geographic area that might yield the largest total benefit in terms of carbon sequestration through landscape restoration. There are also considerable potential co-benefits in these interventions apart from the GHG abatement capacity. Thus specific sites would be chosen in the Northern Region (Savanna Zone), Brong Ahafo Region (Transition Zone) and Western Region (High Forest Zone), which have the potential for the highest carbon and REDD gains.</p>	<p>Pages 10, 11.</p>
<p>Comments 6: <i>Appropriate partners are identified, but information on the level of cooperation is not sufficient</i></p>	<p>Level of cooperation among partners highlighted in text</p>	<p>Page 27 & 28</p>
<p>Comment 7: <i>The stakeholders analysis is clear and well structured. It would however be good to have information on how the proposed activities will impact concerned stakeholders</i></p>	<p>Additional information on impact of project on concerned stakeholders was added to Section 2.1.2 (Stakeholder analysis). Governmental agencies, specifically those in the forest sector, will be able to develop institutional as well as technical capacities that are adamant to progress, as previous attempts to reform the forestry sector have</p>	<p>Page 15.</p>

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	<p>not prompted decisive results. Local communities and authorities shall take part in the investigations particularly in issues regarding benefit sharing. Considering the uncertainty of (the amount of) income from the carbon markets for local communities, the focus on community level is on securing income from forest resources, be it timber or non-timber products. This is critical not only to sustainability, but to REDD+ acceptance in the population.</p>	
<p>Comment 8: <i>2.1.3 Problem analysis: Very broad. The proposal uses the basic logic as presented for other donors in REDD proposals. In this sense the rationale is consistent, but the section lacks to present the specific problem that is relevant for a REDDES proposal and that is additional to what is addressed in the other projects and programs (especially in the implementation of the R-PP with the FCPF and the FIP)</i></p> <p><i>Minor comments :</i> <i>There is confusion about what is technical and what is institutional.</i> <i>Off-reserve is used in the proposal as "trees outside the forest" (p.4). The use of trees outside the forest in REDD+ is challengeable, because REDD looks at a emission reductions or carbon enhancement within the forest.</i> <i>If off-reserve is understood as forest outside the areas defined as permanent forest than the potential for REDD+ activities can be high, if "off-reserve" is understood as "trees outside the forest"(as stated in the proposal) it can be then outside the scope of REDD</i></p>	<p><i>Off-reserve in the context of this project is understood as forest outside the areas defined as permanent forest.</i></p>	
<p>Comment 9: <i>There is no problem tree, missing component</i></p>	<p>Missing component of section 2.1.3 (Problem analysis) was included. The problem tree was included.</p>	<p>Page 19.</p>
<p>Comment 10: <i>Indicators, means of verification and assumptions are extremely vague, no clear outcomes and targets, indicators should be measurable. Some indicators are the same as included in other REDD+ activities in Ghana (e.g. in the R-PP or in the GFIP). The logical framework should clearly show the added value of this proposal vis-à-vis the other REDD+ activities in Ghana. If not it is difficult</i></p>	<p>Section 2.1.4 (Logical framework matrix) was improved to make the indicators, means of verification and assumptions more specific.</p>	<p>Pages 20-22.</p>

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<i>to avoid double funding.</i>		
<p>Comment 11: <i>The development objective is sound, however there are no impact indicators mentioned in the proposal - need to be developed</i></p>	<p>Section 2.2.1 (development objective and impact indicators) was expanded to include impact indicators. The impact indicators are (i) reduction of carbon emissions and the enhancement of carbon stocks, (ii) livelihoods of forest-dependent people secured and (iii) local community are resilient to climate change</p>	<p>Page 23.</p>
<p>Comment 12: <i>The objectives are sound, however there is no clarity on the added value vis-a-vis other REDD+ activities in the country and the section doesn't include the indicators. Even if the logical framework include some indicators these should have been explained in this section. As mentioned above, the indicators mentioned in the logical framework are extremely vague. In the section on specific objective and outcome indicators the proposal should explain in detail how they want to articulate with the creation of baseline scenarios and the MRV. It needs to be kept in mind that the project is running in parallel to the activities of the FCPF and FIP and therefore it is not sufficient to state that the REDDES proposal will serve as an input (if the results of the REDDES project are ready at the same time as the results from those other projects, then the REDDES outcomes can not be considered an input anymore)</i></p>	<p>The outcome indicators was mentioned and explained in Section 2.2.2 (specific objective and outcome indicators). The proposed project is aimed at providing the background information for the review and implementation of the REDD+ pilot projects. Thus the outcome indicators will include the following (i) Several communities apply production systems that are sustainable and contribute to carbon sequestration (ii) Increased participation of local community groups participating in the implementation of REDD+ pilots. (iii) Change in behaviour of local communities as a result of participating in REDD+ projects developed, (iv) Enhanced positive impact of successful REDD+ implementation on local people, (v) Effective benefit sharing and incentive mechanism that can be easily applied to support the implementation of REDD+ projects (v) Successful implementation of REDD+ pilots.</p> <p>The project does not run in parallel to the FIP or FCPF but prepares the groundwork for the implementation of both. REDD+ approaches in off-reserve/agroforests and support benefit sharing mechanism in such areas. The project does not deal with reference level and MRV.</p>	<p>Page 23.</p>
<p>Comment 13: <i>Output: Structure unclear. In page 18 the proposal states what could be the added value of this proposal vis-a-vis other ongoing REDD+ activities in Ghana. It is recommended to build up on this idea and to develop it consistently throughout the 4 outputs: What exactly and concretely does it mean per each output) (e.g. what are the challenges regarding carbon accountability that arise from these pilot actions? What capacity building is needed and additional to the other REDD+ activities? Why should these additional activities be undertaken now and not after setting a clear national framework?)</i></p>	<p>Section 3.1.1 (outputs and indicators) was developed further to explain each of the outcomes of the proposal.</p>	<p>Pages 24 and 25.</p>

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<p>Comment 14: <i>Some activities seem to be a duplication of activities planned in other programs. A clear example is activity 2.2 "Develop access & benefit sharing mechanisms with a focus on opportunities to benefit from REDD+ for key stakeholders, including fringe communities (desk study + field work)", which is included in the R-PP. Perhaps the proponents thought of additional or of complementary activities, but this is not shown in the proposal</i></p>	<p>The activities was modified and adjusted to avoid duplications with other programmes (Section 3.1.2 Activities)</p>	<p>Page 26</p>
<p>Comment 15: <i>Implementation approaches and methods: Specific methods and approaches for REDD+ are not mentioned in the section</i></p>	<p>Section 3.2 (Implementation approaches and methods) was modified to include specific methods for REDD+. The REDDES project is embedded in the framework that is already established for the Readiness Process aiming at the REDD+ implementation. This guarantees, in the first place, that the consultation processes with relevant stakeholders will be assured and that full coordination with the ongoing work in readiness (Phase 1 of the RPP) is taken place.</p>	<p>Page 26.</p>
<p>Comment 16: <i>Reconsider the time allocated for the analytical studies. Six months seem to be a very short time for it (even if the studies are embedded on thesis). It seems strange that you need the same time for publishing the results than for undertaking them). The consistency in presenting each quarter should be improved (e.g. Q1 = 4 months, Q5 = 6 months)</i></p>	<p>The workplan (Section 3.3) was modified and the timing adjusted appropriately. Each quarter covers a period of three months to ensure consistency.</p>	<p>Page 29.</p>
<p>Comment 17: <i>Detailed Master Budget missing</i></p>	<p>Missing component of section 3.4 (Master budget) was included.</p>	<p>Pages 30-33.</p>
<p>Comment 18: <i>Consolidated budget by component: Not consistent with project duration</i></p>	<p>The consolidated budget by component of Section 3.4.1 was modified to be consistent with the project duration</p>	<p>Pages 34-36.</p>
<p>Comment 19: <i>Assumptions and risks: Other risks and assumptions were done in the R-PP and the GFIP. If these don't apply for this proposal, please explain why. If the risks and assumptions apply, please complement</i></p>	<p>More explanations were included to clarify issues on the Assumptions and risks of Section 3.5.1. The main risk is the uncertainty at the <u>international level</u> on the feasibility of the introduction of an implementable REDD+ strategy for the countries and the insecurity in respect to the further development of the World's carbon market. However, even if the implementation of the R-PP is delayed, or the decision on REDD+ being a market instrument will not be taken at UNFCCC,</p>	<p>Page 41.</p>

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	<p>the project is fully in line with low carbon strategies and brings additional other benefits for poverty alleviation.</p> <p>On the <u>national level</u>, coordination among the different initiatives in the field of climate change and mitigation can become an issue. Yet the responsibility for coordination is clearly assigned to ENRAC, which has access to information of the committees overseeing particular programmes. The political will that is addressed as a potential risk by the GFIP is not a direct issue in this project, as the work to be done under REDDES could on the contrary be an instrument to encourage measures. In the long-run, the political processes that should support the implementation of sustainable land-use practices are a challenge to the existing projects. However, pilots will be geared at practical solutions in the field and therefore less dependent on long-run political processes regarding REDD+.</p> <p>This project is also aimed at minimizing the risk of “resistance to change” that exists for larger projects as the complete REDD+ implementation and the FIP in that it launches studies that make the experiences and knowledge of local people available for the implementation of the mentioned programmes.</p> <p>In addition, a risk that is mentioned in the RPP is that different expectations with respect to the benefits and risks associated with REDD+ could exist among stakeholders within and outside of the Government. As REDDES has not the aim to implement REDD+, but to assess potential challenges of REDD+ implementation, the risk does not apply here.</p>	
<p>Comment 20: <i>Sustainability: Too weak elaboration on the sustainability after project completion</i></p>	<p>Section 3.5.2 (sustainability) was improved with institutional sustainability and political sustainability. The Institutional sustainability is achieved through the project execution by the National REDD+ Secretariat which reports to the Forestry Commission. FORIG on the implementation level can directly feed the experiences into the R-PP process. Political sustainability will be achieved through the alignment with national policies. The implementation of REDD+ is one of Ghana’s NAMAs.</p>	<p>Pages 41 and 42.</p>

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<p>Comment 21: <i>Executing agency and partners: Some relevant expertise required from the implementation of this proposal is not shown by the executing agency and partners. This is especially true for expertise in accounting carbon and on defining MRV systems or applying REDD+ at the field level. It is recommended to consider the possibility to get a partnership with the specific agencies dealing with this topics in Ghana (either through the FIP or the FCPF programs)</i></p>	<p>All the major partners of the FIP and FCPF programs are collaborators in this ITTO project, namely; National REDD+ Secretariat, Forestry Commission (FC), Forestry Research Institute of Ghana (FORIG), Ministry of Lands and Natural Resources (MLNR) through the REDD+ Secretariat.</p>	
<p>Comment 22: <i>Project management team: Please complete the CVs from HAFL</i></p>	<p>CVs of HAFL staff inserted in project document</p>	<p>Pages 46 & 47</p>
<p>Comment 23: <i>Project steering committee: Proposal for the PSC is not in line with the ITTO guidelines</i></p>	<p>Section 4.1.3 (Project steering committee) was modified to reflect ITTO guidelines. The composition of the PTC is</p> <ul style="list-style-type: none"> - A chairperson appointed by the Executing Agency, - one representative of the ITTO, - one representative of ENRAC/REDD Secretariat Accra, - one representative of SECO/Swiss Government, as well as - one representative of FORIG and - one representative of HAFL - one representative of relevant non-governmental organisations (NGOs) - one representative of the Ministry of Lands and Natural Resources, Ghana - Project coordinator, who shall be the secretary of the PSC. 	<p>Page 46.</p>
<p>Comment 24: <i>Stakeholder involvement mechanisms: Please complete the specific participation mechanisms, especially related to local communities</i></p>	<p>Section 4.1.4 (Stakeholder Involvement and Mechanisms) was modified to include specific participation mechanisms. Stakeholders on governmental level will be involved through a consultation process led by FORIG. On the level of communities, all types of analytical work conducted at local level will prior be discussed and agreed upon with local stakeholders. The researchers' procedure will be to transparently inform local stakeholders and to make sure that knowledge gained will be shared. The outcomes of the project and in particular the main output - the full project proposal that supports RPP implementation - will be largely consulted through the established consultation mechanism of the RPP. Collaboration with related projects/programmes will also be sought</p>	<p>Page 46, 47</p>

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<p>Comment 25: <i>Reporting, review, monitoring and evaluation: Monitoring needs to be in line with ITTO guidelines. Please bear in mind that even pre-projects with less budget and duration have a more stringent monitoring system</i></p>	<p>through established mechanisms at FORIG. Section 4.2 was modified to be in line with ITTO guidelines. According to ITTO procedures, a Project Technical Committee (PTC) will be installed (see section 4.1.3). The progress of the project implementation will also be reported through the ITTO online monitoring system (OLMS). In addition, self-evaluation (at completion) for the project will be carried out. The internal monitoring will be led by one senior collaborator of ITTO, FORIG, HAFL and a representative of the Swiss Embassy. It can be done by video conferencing. For the final self-evaluation, the same team, under the guidance of the ITTO project officer responsible, will lead a discussion with the main collaborators to the project. The results of the self-evaluation will be used in fine-tuning the activities foreseen for the rest of the project cycle.</p>	<p>Page 47</p>
<p>Comment 26: <i>Dissemination of project results: Consider linking with the dissemination systems of FIP and FCPF</i></p>	<p>Section 4.3.1 on disseminating of project results was linked to the systems of FIP and FCPF. The principal result of the REDDES project will be a main project document that supports the implementation of the RPP. The Results of the project will be disseminated as follows</p> <ul style="list-style-type: none"> • Sharing of the project results in established committees such as Forest Watch and Forest Forum • Stakeholder workshops on study results • Publication of study results in scientific journals, and through the ITTO and FCPF • Media programmes such as radio talkshows will be used as a means of public education and sensitization on REDD+ issues. It will also be considered to use the dissemination systems of FIP and FCPF. 	<p>Page 47.</p>
<p>Comment 27: <i>Mainstreaming project learning: the section is very poor. A good review is therefore not possible. Please complete</i></p>	<p>Section 4.3.2 on mainstreaming of project learning was improved with more clarification. The results available after project completion should be integrated in the national REDD+ development process. This will be ensured through:</p> <ul style="list-style-type: none"> - the implication and direct execution of the project through the relevant Ghanaian agencies which are involved in the national policy processes such as FORIG 	<p>Pages 47, 48.</p>

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	<ul style="list-style-type: none"> - the internal learning processes of these institutions - the liaisons to ENRAC, the Environment and Natural Resources Advisory Council on the Cabinet Level, which oversees the development of the REDD+ preparations for the GoG through the Technical Coordinating Committee). Through the involvement of the FC Climate Change Unit in the project, the project learnings will be fed into national processes of REDD+ readiness preparation. <p>In addition, Ghana plays an active role in the international climate talks (UNFCCC) at technical and political levels and can provide a feedback in the context of elaborating a global REDD+ mechanism. Ghana is particularly well placed to exchange lessons learned through the readiness process with its neighboring countries, in particular Liberia, which has large forest areas. Examples of such collaborations exist already, such as Ghana's support to the formulation of Liberia's new reforestation policy and afforestation strategy supported by ITTO with SECO funding</p>	