



**New Partnership for  
Africa's Development (NEPAD)  
Comprehensive Africa Agriculture  
Development Programme (CAADP)**



**Food and Agriculture Organization  
of the United Nations  
Investment Centre Division**

## **GOVERNMENT OF THE REPUBLIC OF LIBERIA**

### **SUPPORT TO NEPAD–CAADP IMPLEMENTATION**

**TCP/LIR/3005 (I)  
(NEPAD Ref. 06/49 E)**

**Volume IV of IV**

### **BANKABLE INVESTMENT PROJECT PROFILE**

**Project for Market-oriented Agroforestry  
and Tree Crops Production Systems**

*September 2006*



**LIBERIA: Support to NEPAD–CAADP Implementation**

**Volume I: National Medium–Term Investment Programme (NMTIP)**

*Bankable Investment Project Profiles (BIPPs)*

**Volume II: Project for Inland Swamp Rehabilitation and Development**

**Volume III: Project for Sustainable Fisheries and Aquaculture Development**

**Volume IV: Project for Market–oriented Agroforestry and Tree Crops  
Production Systems**



## NEPAD–CAADP BANKABLE INVESTMENT PROJECT PROFILE

**Country:** Liberia

**Sector of Activities:** Tree crops, Agroforestry

**Proposed Project Name:** **Project for Market-oriented Agroforestry and Tree Crops Production Systems**

**Project Location:** Lofa, Bong and Nimba Counties

**Duration of Project:** 5 years (estimate)

**Estimated Cost:** Foreign Exchange .....US\$9,500,000  
Local Cost.....US\$500,000  
**Total ..... US\$10,000,000**

**Suggested Financing:**

<i>Source</i>	<i>US\$ million</i>	<i>% of total</i>
<i>Government</i>	–	–
<i>Financing institution(s)</i>	10.0	100
<i>Beneficiaries</i>	–	–
<i>Total</i>	<b>10.0</b>	<b>100</b>



## LIBERIA

### NEPAD–CAADP Bankable Investment Project Profile

#### *“Project for Market–oriented Agroforestry and Tree Crops Production Systems”*

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### **Currency Equivalents**

(September 2006)

Local Currency	=	Liberian dollar (L\$)
US\$1.00	=	L\$59.50
L\$100	=	US\$1.68

### **Abbreviations**

ADB	African Development Bank
CAADP	Comprehensive Africa Agriculture Development Programme
DANIDA	Danish International Development Agency
FAO	Food and Agriculture Organization of the United Nations
FDA	Forestry Development Authority
ICRAF	International Center for Research and Agroforestry
IFAD	International Fund for Agricultural Development
IITA	International Institute of Tropical Agriculture
MOA	Ministry of Agriculture
NEPAD	New Partnership for Africa’s Development
NGO	Non-Governmental Organization
USAID	United States Agency for International Development



## **I. PROJECT BACKGROUND**

### **A. Project Origin**

I.1. The *Project to support tree crops and market-oriented agroforestry* responds to the Ministry of Agriculture’s national targets of rehabilitating 95,000 ha of tree crops and agroforestry plantations, replanting 3,000 ha of old plantations, establishing 9,000 ha of new plantations and establishing 6,000 ha of community agroforestry within five years. The project forms part of the national strategic plan for the period 2006–2010. It also falls within the CAADP, particularly its pillars of sustainable land management and water control, and sustainable development of livestock, fisheries and forestry resources. Overall, the current government places agriculture as a top priority in its development agenda.

I.2. In Liberia, a number of national and international development agencies have made interventions to revitalize the tree crops sector. A wider scale of intervention is required, coupling it with governmental action.

### **B. General Information**

I.3. The Republic of Liberia is located on the West coast of Africa. It has an extension of about 100,000 km<sup>2</sup> and, according to recent estimated, a population around 3.5 million. Since the 1990s, the country suffered a harsh civil war, but peace has settled and development is resuming.

I.4. Liberia has a good rainfall and two main geo-ecological zones: the coastal lowlands and the uplands. The interior is heavily forested and has hills and mountains reaching 1,380 m of elevation. These hilly areas are very suitable for some economic trees and tree crops, as well as for agroforestry practices. In fact, the interior areas have a long tradition of cultivating cocoa, coffee and oil palm, as well as other potentially economic tree crops such as mango, papaya, kola and cashew. The lowlands are more fertile soils and more suitable for annual crops.

I.5. About 3% of cultivated land is under perennial crops, which include cocoa, coffee, oil palm and rubber. These are largely concentrated in the North, Central and Western Regions. There are approximately 35,000 ha of cocoa, 40,000 ha of coffee, 70,000 ha of oil palm and 150,000 ha of rubber. In addition, small holdings of citrus, coconut palm, kola, mangos and plantain are scattered all around the country.

## II. PROJECT AREA

II.1. The project will intervene in the counties of **Lofa**, **Bong** and **Nimba**. These are highland counties, with successful past experience on tree crops. Their ecological and social conditions are favourable for resuming tree crop systems and expanding agroforestry practices.



II.2. The northern parts of Lofa and Nimba counties are constituted of grassland savannah interspersed with catchments of forest vegetation. The rest of the areas are covered with forest, allowing the sustainable production of cocoa and coffee.

II.3. The major concentration of cocoa farmers is found in the Bong, Lofa and Nimba counties. As a result of the war, many of these farms were abandoned, leading to a heavy overgrowth, diseases and pests. Oil palm plantations in Liberia commenced in the 1970s and cover more than 70,000 hectares. The largest amounts of small holder’s farms are located in the project counties, which are found on the higher interior of the country.

### III. PROJECT RATIONALE

III.1. **Status of tree crops sector.** The tree crops sector faces major constraints, which range from abandonment of farms and weak production practices to lack of farm extension support and depleted marketing infrastructure and means. Furthermore, in the past, the planting of crops on soils without prior appraisal tests, executed by extension officers, left many farmers distressed. Tree crops have been promoted without adequate research and technical background. Although certified seed gardens for cocoa and coffee still exist in Lofa County, hybrid parent stocks for oil and coconut palms were destroyed during the civil war. In fact, war caused farmers to flee and abandon their farms, disrupted extension service delivery at the village level, and vandalized farm machinery and warehouses. As a result of this, a secondary forest overgrew on top of former plantations.

III.2. **Institutional background.** The Government of Liberia, along with various partners, devoted notable investments and efforts to support the cultivation of tree crops. Tree crops plantations and certified clonal seed gardens were established to enhance production. They are nowadays dysfunctional. MOA has to start from scratch to re-establish the institutional framework supporting tree crops farming. In view of the paramount needs, as well as the proposed deployment of new agroforestry practices, it is proposed that the country benefits from support from international research and agricultural centres in the sector, such as particularly IITA and ICRAF.

III.3. **National targets.** The project responds to a national goal for rehabilitating and replanting tree crops farms. The national targets for tree crops’ rehabilitation and replanting, together with an estimate of agroforestry development potential, are summarized in Table 1 below.

Tree crop	Rehabilitation	Replanting	New planting	Total
Cocoa	40,000	1,500	1,500	43,000
Coffee	35,000	1,500	1,500	38,000
Oil Palm	15,000	-	3,000	18,000
Agroforestry (estimate)	5,000	-	6,000	11,000
<b>Total (ha)</b>	<b>95,000</b>	<b>3,000</b>	<b>12,000</b>	<b>110,000</b>

III.4. **Marketing challenges.** The weak marketing structure leaves farmers extremely vulnerable to middlemen who abuse them. This has caused some farmers to cut down their coffee farms to try other crops and other land uses. However, tree crops have a notable potential in the country for employment and income, if fair marketing schemes and adequate farmer support were deployed.

III.5. **Agroforestry.** Interventions in the agroforestry sector have not been yet relevant in Liberia, and agroforestry remains a new and poorly known farming system. The few concerted agroforestry efforts ever made were thwarted by the civil war, and the momentum was lost. However, agroforestry can respond well to the needs of farmers in terms of food security, income, fuel-wood sources and ecological sustainability. The savannah areas are highly suitable, and in urgent need of agroforestry as a farming and economic alternative.

III.6. **Seed production.** The only certified cocoa and coffee seed garden in Liberia is located in Lofa County and it needs immediate rehabilitation. This is a priority in order to bring cocoa and coffee farms back into top production. Concerning coconut and oil palms, the Liberian seed gardens were destroyed during war and new parent stock need to be sourced from abroad.

#### **IV. PROJECT OBJECTIVES**

IV.1. The main objectives of the project are to improve the income of rural households and enhance the environmental sustainability of farming systems.

IV.2. The specific objectives of the project are as follows:

- to rehabilitate existing tree crops’ farms;
- to restore rural infrastructure and local capacities to support production and marketing of tree crops;
- to promote agroforestry practices as part of enhancing the productive and environmental sustainability of farming systems in the highland counties;
- to revitalize the marketing system for tree crop and agroforestry products;
- to strengthen the capacity of MOA extension personnel and grassroots community organizations for developing tree crop and agroforestry systems.

#### **V. PROJECT DESCRIPTION**

V.1. The project, which would run for 5 years, would comprise three main components:

- Rehabilitation of cocoa, coffee and oil palm farms;
- Promotion of agroforestry practices;
- Support for the marketing of tree crops products.

##### **Component 1: Rehabilitation of cocoa, coffee and oil palm farms**

V.2. Under this component, the Project will provide technical support and co-financing for materials, aiming at facilitating the rehabilitation of abandoned or low-productive farms of cocoa, coffee and oil palm. The priority support will be given to smallholder farmers. The target is to rehabilitate or replant around 15,000 ha of farms, involving 15,000 to 30,000 farmers. The Project may finance new plantations in areas lacking tree crops farms, if marketing opportunities justify so. In general, the project is not expected to play a direct role in the rehabilitation and development of tree crop plantations, but rather provide the necessary financial, material, technical and scientific support for both the public and private sectors to facilitate a viable and competitive sector in Liberia.

V.3. The Project will finance activities for organized farmers, such as may be a group of cocoa producers. The Project will provide technical support and assist farmers financially to purchase materials and equipment to rehabilitate their farms. Technical support will comprise topics such as “best practices” for planting and maintaining a tree crop farm, integrated pest management, post-harvest activities, organizational capacities, and marketing skills. Materials to be partially financed may comprise seeds, tools, and equipment for a nursery, among others.

V.4. The Project will support the production of planting materials (seeds, seedlings, cuttings, suckers, bud-lings, etc.) and assist in the establishment of nurseries in project areas.

V.5. Agro-sylvicultural, sylvo-pastoral, and agro-sylvo-pastoral techniques will be introduced in the farms to improve their ecological and economic values. For example, the introduction of honey bee would enhance pollination of crops and provide additional income sources.

### **Component 2: Promotion of agroforestry practices**

V.6. This component will provide assistance to interested farmer groups to apply agroforestry practices. This assistance will comprise technical advice, organizational capacities and small storage facilities and seeds, according to the specific needs and the proposed activities by the beneficiary group. The objective is to engage about 2,000 farmers in agroforestry systems in about 6,000 ha of farms in degraded savannah land. The approach is to set up pilot experiences that will provide lessons learned and modus operandi for expanding this set of practices across the country.

V.7. The project will also finance campaigns for communities to plant multi-purpose and nitrogen fixing trees in communal woodlots, degraded lands, along roadsides and watersides, and in dwelling areas.

V.8. Developing agroforestry systems will serve farmers to enhance food production, income generation, and a sustainable farming system (with due soil and pest management practices). Agroforestry has proven to be a sound environmental protection practice in areas threatened by savannah encroachment, as well as to halt land degradation in areas prone to bush fires, charcoal activities and declining fallow periods.

### **Component 3: Support for the marketing of tree crop products**

V.9. This component intends to catalyze the marketing system for tree crops' products, ensuring that smallholder farmers have a fair and effective access to markets. The component will finance activities, organizational support and infrastructure aiming to empowering farmers before the market system, ensuring better and fairer market access for their products, arresting the power of monopolizing intermediaries, supporting the customary roles of women in agricultural marketing, and broadening the marketing opportunities for tree crops' products.

V.10. The main interventions under this component comprise as follows:

- provide organizational and training support to stimulate farmer commercial groups, such as cooperatives and associations;
- co-finance small-scale infrastructure and equipment to facilitate storage, agro-transformation and commerce for tree crops' products;
- introduce seed capital for pilot initiatives to develop “fair trade” and “organic products” schemes.

V.11. Examples of activities that may be financed under this component comprise the registration and reactivation of farmer cooperatives/associations, restoration of basic marketing infrastructures (warehouses, drying floors, processing equipment, etc.), training in post harvest technology (grading, cleaning, testing, export packaging transporting, value added technology, etc.), introducing financial management skills, creating small factories for processing Liberian produce, and market research, analysis and information dissemination.

V.12. The Project will provide post harvest facilities for communities under loan schemes.

V.13. The Project may finance the establishment of a Produce Marketing Board comprising farmers’ representatives, the Registrar of Cooperatives, NGOs and the government to negotiate prices in the best interest of the Liberian Farmers, for future sales in national and international markets. The project would support training in various aspects of produce marketing.

V.14. The project can also co-finance the setting up of processing factories for tree crops products, under private ownership, to prevent annual wastage and add value to tree crop produce. The following processing factories are proposed for consideration, in the three counties of Bong, Lofa and Nimba:

- *Palm oil processing plant* – for refining palm oil, production of palm kernel oil, production of margarine, animal feed, industrial oil etc.
- *Cocoa and coffee processing factories* – to process cocoa and coffee into beverages, confectioneries, pharmaceutical and cosmetic products as well as into secondary products.
- *Jam making and fruit juice factories* – to process fruits, including native Liberian fruits, into value added products, *preventing* the annual wastage of fruits during peak seasons. The project would encourage the training of Liberians in Home Economic and food research to give support and enhance sustainability of this work.
- *Coconut processing plant* – for oil, biscuits, cakes, animal feed and bottling of coconut water.



NEPAD – Comprehensive Africa Agriculture Development Programme  
**Liberia: Investment Project Profile**  
*“Project for Market-oriented Agroforestry and Tree Crops Production Systems”*

## VI. INDICATIVE COST

VI.1. Overall project’s costs per component are summarized in Table 2 below.

Component	Local	External	Total costs
1. Rehabilitation of cocoa, coffee and oil palm farms	150,000	4,500,000	4,650,000
2. Promotion of agroforestry practices	150,000	2,000,000	2,150,000
3. Support for marketing of tree crops' products	50,000	1,500,000	1,550,000
Project management and contingencies	150,000	1,500,000	1,650,000
<b>Total (US\$)</b>	<b>500,000</b>	<b>9,500,000</b>	<b>10,000,000</b>

VI.2. An indicative cost of main expenditure lines is proposed below (Table 3). It is based on some unit costs.

Items	ha	Quantity	Unit cost (US\$)	Total Cost (US\$)
<b>Crop seedlings</b>				
Cocoa/Coffee	6,000	7,680,000	0.15	1,152,000
Oil Palm	3,000	411,000	2.85	1,171,350
Agroforestry	6,000	4,045,500	2.3	930,465
Mortality	-	-	15%	488,072
<b>Subtotal</b>				<b>3,741,887</b>
<b>Capacity Building</b>				
Training (farmers)	15,000	15,000	100	1,500,000
Staff training	-	-	150,000	150,000
Infrastructure	-	-	200,000	200,000
<b>Subtotal</b>				<b>1,850,000</b>
<b>Tools &amp; Equipment</b>				
Tools	15,000	-	35	525,000
Equipment (huller)	-	120	2,000	240,000
Bee hives	-	1,800	50	90,000
Beekeeping gears	-	600	100	60,000
<b>Subtotal</b>				<b>915,000</b>
<b>Project management</b>				
Vehicles	-	-	lump sum	200,000
Administrative costs	-	-	12% of total Project	1,200,000
Contingencies	-	-	5% of total Project	500,000
<b>Subtotal</b>				<b>1,900,000</b>

## **VII. PROPOSED SOURCES OF FUNDING**

VII.1. The implementation of these initiatives would depend on timely support to the agricultural sector. The main support has always come from both the government and donor sources community. However, due to the shattered economic state of the Liberian government (just after 15 years of war) agricultural projects rely substantially on the donor community.

VII.2. The major donors and development partners that are active in the agricultural sector in the Region, and likely to play major role in Liberia, include the African Development Bank, the Danish International Development Agency (DANIDA), the European Union, FAO, IFAD, USAID and the World Bank. Some of them, in fact, were engaged in tree crops in Liberia before the civil war, and are likely to resume their former commitment. Currently, USAID is giving support to cocoa rehabilitation in Nimba County.

## **VIII. PROJECT BENEFITS**

VIII.1. The project would accrue to three main stakeholders of the sector: farmers, government and the rural communities as a whole.

VIII.2. The *farmers* would benefit as follows: (i) tree crop plantations are rehabilitated, re-established, extended and protected from pests and diseases; (ii) farmlands would be conserved and protected from further erosion; and (iii) storage, processing, transportation and marketing means would be available and functional. All that should increase plantation productivity and improve their incomes. They would also benefit from a greater and more accessible fuelwood supply.

VIII.3. The *government* would have greater capacities to support the tree crops subsector and deploy new agroforestry practices. Rural infrastructure and more dynamic rural economies would also benefit governance, the national economy and the fiscal revenues.

VIII.4. The *communities* would globally benefit from a more dynamic rural economy and from the new employment opportunities related to the tree crops subsector.

## **IX. IMPLEMENTATION ARRANGEMENTS**

IX.1. The Ministry of Agriculture and the Forestry Development Authority (FDA) would carry out the responsibility of executing this project, as they are the main government agencies responsible for promoting the development of the agricultural sector in Liberia and agroforestry systems. The MOA would have the overall responsibility of supervising and coordinating the project.

IX.2. Since MOA and FDA lack adequate trained manpower to successfully implement the project in a timely and qualitative manner, it is suggested to engage external expertise. In particular, it is proposed the establishment of a cooperation framework with a major international agricultural research and development centre, particularly the International Institute for Tropical Agriculture (IITA) or the World Agroforestry Center (ICRAF). Both have well-established programmes on tree crops and agroforestry, as well as extensive field experience in West Africa as well as at the community level.

## **X. ISSUES, RISKS AND PROPOSED ACTIONS**

X.1. **Agroforestry aspects.** Agroforestry represents an economically and environmentally sound means to upgrade traditional farming systems. The type of agroforestry technology for each area or agricultural system must be carefully considered so as to reflect the needs of farmers and the potential benefits. Extension workers and lead farmers need adequate training so that agroforestry can be deployed.

X.2. **Roads and rural infrastructure.** Roads and rural infrastructure are necessary for realizing the economic potential of tree crops in Liberia. There needs to be more consideration of quality of works and maintenance schemes.

X.3. **Participation.** A participatory approach is key to the successful implementation of this project. Working along with the local authorities as key actors in resolving traditional bottlenecks is essential, particularly in negotiations for land and other sensitive issues, the adoption of participatory approaches is sure to soften the stance of communities in the process of negotiating. Wherever possible, local NGOs with experience in agroforestry design and management, beekeeping, tree crop development and the like could be contracted to assist in the implementation of certain aspects of the project. The project should encourage field staff to show flexibility in designing and implementing the interventions at village level so to reflect the best interests and socio-economic conditions of the communities concerned.

X.4. **Planting material supply.** Planting material for cocoa and coffee can be acquired from the seed gardens in Lofa County. The parent stock for oil and coconut palms were destroyed during these years of civil strife; therefore the project should engage in the import of certified pre-germinated seeds from the Region to supply farmers, until local seed gardens are re-established to supply planting materials in sufficient quantities to satisfy national demand.

X.5. **Funding mismanagement.** In the past, previous agricultural programs experienced considerable draining of funds for election campaigns or private interests. The risk of mismanagement should be addressed in the final design and during the implementation of the project, through adequate monitoring, auditing and public transparency mechanisms.