

APPLICATION FOR DONOR GRANT TO IMPROVE SANITARY AND PHYTO-SANITARY (SPS) CAPACITY OF SIERRA LEONE



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1.0 PROJECT BACKGROUND AND RATIONALE

1.1 Background to the Project

The Republic of Sierra Leone is a small country located on the coast of West Africa with a land area of 72,325 sq km. It has a population of 4.9 million (2002 estimate) and an annual population growth rate of 2.4%. The country is surrounded by the Republic of Guinea to the north and west, Liberia to the southeast and the Gulf of Guinea to the southwest. The capital Freetown has an estimated population of 550,000. Sierra Leone has three main provinces: Southern (provincial capital is Bo), Eastern (provincial capital is Kenema) and Northern (provincial capital is Makeni).



The economy is predominantly agricultural with an estimated 67% of the population engaged in agriculture and related activities. Agriculture contributes an estimated 42% of National Gross Domestic Product (GDP). Of the cultivated land area, about 80% is for food crops while the remaining 20% area is devoted to cash crops such as cocoa, coffee, ginger, palm kernels, banana and citrus.

The relative proximity of Sierra Leone to the United States (U.S.) and the European Union (EU) also gives it export advantage compared to most West African countries. Despite this potential, agro-industry's contribution to GDP remains at 42%. Major agricultural exports of Sierra Leone are cocoa, coffee, ginger, fish and seafood products.

Since 1995, Sierra Leone experienced an outbreak of civil war that destroyed infrastructure of public and private institutions for food production and export. Though the war ended in 2002 with a return to multi-party democracy, many public institutions including those responsible for food safety, crop and animal health — lost much of their original capacity in terms of physical infrastructure, human resources, institutional memory, databases and documentation. The state of Sanitary and Phyto-sanitary (SPS)

institutions in Sierra Leone is claimed to be worse than it was before the war. Massive injections of capital are therefore required to rehabilitate SPS structures to meet international standards.

The Government of Sierra Leone intends to revive its agricultural export sector in order to increase its foreign exchange earnings to put the economy back on track. At a workshop in Freetown in February 2008, stakeholders prioritized cocoa and coffee as the key export products on which both the private and public sector must focus for exports. Whilst other programmes are on-going to ensure increased production of cocoa and coffee, the Government of Sierra Leone intends to seek Donor grants to develop a quality assurance system for the exports of cocoa and coffee. It is however expected that any improvement in phyto-sanitary control for cocoa and coffee will also increase the overall capacity of Sierra Leone for phyto-sanitary control of other agricultural export crops.

It is estimated that over 40 percent of the farming family population are engaged directly and indirectly in cocoa and coffee production. The proposed project will therefore impact positively on a major segment of the population in Sierra Leone, increase farm incomes, living standards and increase foreign exchange earnings from cocoa and coffee by a minimum of 40 percent within the next five years.

1.2 Present Quality Assurance System for Cocoa and Coffee in Sierra Leone

Key factors identified that contribute to low quality of cocoa and coffee for exports include diseased pods, poor fermentation, drying and handling both on the farm and in transit to ports as well as inadequate farmer awareness of expected international quality standards. Low grade products are usually the result of fungal infection and insect pests' infestation in storage. Any significant reduction in these losses would increase volumes exported and increase foreign exchange earnings.

Presently, institutions for quality assurance have low capacity. It will therefore be important for a study to be conducted along the value chain to ascertain the points where fungal growth and aflatoxin production are critical. This study will form the basis of designing a system for aflatoxin control.

An FAO/UNDP mission report concluded that the level of services provided to farmers and agro-industry by the Crop Protection Services was unsatisfactorily low and needed to be upgraded. The report recommended the establishment of an effective National Crop Protection Service that will deal with all aspects of pre-and post-harvest crop protection, provide technical support on plant protection matters to the various agricultural projects and parastatal organizations with agricultural components. The Crop Protection Unit presently has two sections namely (a) Pest Control Unit and (b) Phytosanitary Control Unit.

The Pest Control Unit which deals with field crop activities such as pest surveillance advises and guides farmers according to Integrated Pest management (IPM) principles, etc. The unit has offices and staff in all 14 Agricultural Districts working with the farming community in collaboration with the general extension services of the Ministry of Agriculture, Farmer Field Schools (Operation Feed the Nation), Mattru Oil Palm Project, NERICA, Rice Research Center Rokupr, Njala Agricultural Research Center, other agencies and NGOs with crop production components such as CARE, CRS, JICA, ActionAid, Seed Multiplication Unit, etc. Presently there is no public sector program to ensure mass spraying of cocoa and coffee as well as control of pests and diseases.

Under the Pest Control section of the Crop Protection Unit of the Ministry of Agriculture, the Extension Services will be tasked to ensure that farmers are educated and trained in effective control of diseases and pests that affect cocoa and coffee in the field. Mass spraying of cocoa and coffee against pandemic and

pathogenic diseases such as the cocoa necrosis virus, swollen shoot virus, and cocoa Blackpod disease *Phytophthora palmivora* will be undertaken. The Unit will also train farmers and produce collectors and private produce buyers in best practices of fermentation and drying and moisture control, rodent control and reduction of post-harvest losses.

The Phytosanitary Control Unit presently deals with plant quarantine measures such as phytosanitary inspections, treatments and certification of plants and plant products for export that conform to the requirements of the International Plant Protection Convention (IPPC) and the SPS agreement of WTO. The Unit maintains presence at (i) the Lungi International Airport, (ii) the Queen Elizabeth II Quay, (iii) Kambia and (iv) Jendema (MRU) border points of entry. A team of Phytosanitary Inspectors has recently been posted to re-establish two border points of entry at Buedu and Koindu in the Kailahun district. The Phytosanitary Unit provides some level of quarantine measures to these border points with very limited technical and administrative support such as logistics including, office supplies, basic inspection and testing equipment, transportation, and in-service training.

Under the proposed project, the Unit will also be responsible for the issuance of final phyto-sanitary certificates for exports of cocoa and coffee. In so doing it will collaborate with the Produce Inspection Unit to ensure that quality standards set by the Sierra Leone Standards Bureau (SLSB) are met. It will also collaborate with the Njala University to ensure that special analysis for heavy metals and other analysis are undertaken in accordance with international regulations. Aflatoxin (purple beans) is the main fungal problem of cocoa. The University and the SLSB will ensure that it has capacity for aflatoxin testing along the value chain and at final point of export inspection.

The Field Inspectorate's capacity for disease surveillance and monitoring is considered 40% of expected with its network of only three phyto-sanitary stations in Sierra Leone. Generally, documentation of surveillance systems for the Unit falls short of expectations. Data on plant pests is not collated to enable the maintenance of an effective surveillance system. Lists of pests in declared 'pest free' areas, places of production and sites of production are not available. Officials need training to improve information documentation, computerization of databases on plant pests and number of crops surveyed. Apart from the Phyto-sanitary Handbook, other documentation such as taxonomic keys for pest identification, pest data sheets for biological information on pests, textbooks, scientific journals, and databases of import requirements for other countries are unavailable. The database system is manual and not very efficient. This could be improved through modern software programs that enable sorting, queries, reference by categories and easy retrieval systems. A study undertaken by USAID – West African Trade Hub in 2006 rated the database system at 25 percent.

Since 1976, the phyto-sanitary legislation has never been reviewed and falls well behind modern requirements for International Sanitary and Phytosanitary Measures (ISPMs) of the International Plant Protection Convention (IPPC) and the provisions of the Inter African Phyto-sanitary Council (IAPSC).

Under the project, a complete revision is required of the Act and Rules to provide for some current IPPC concepts. The current Plant Pest (Inspection of Crops) Rules of 1946 and the Noxious Weeds (Control) Rules of 1957 should be expanded beyond quarantine of domestic products to include quarantine of imported products. These should be part of a single body of rules that cover both international and domestic quarantine. The Rules should also be strengthened to allow the unit through its Minister to proclaim any part of the country as being infested by a particular pest as well as the control of the movement and cultivation of specific plants. Although the Agriculture Act of 1946 provides for rules to be made concerning the payment of fees for quarantine service, no such provision was subsequently made in later rules.

SPS institutions in Sierra Leone lack the basic laboratory facilities and equipment to ensure efficient inspection, analysis and certification of imported and exported agricultural products. Currently there are no accredited laboratories in Sierra Leone.

SLSB Equipment and Facilities: The SLSB has not been able to set up its own laboratories, thus it is presently utilizing the laboratories of the University of Sierra Leone to meet its testing requirements. It is presently engaged in inspection of food items entering the country at the Queen Elizabeth 11 Quay in Freetown, which is the country's major port of entry for goods into the country. As the Bureau's activities expand, inspection points will be replicated throughout the country.

Phyto-sanitary equipment and Facilities: There are no entry/exit and post-entry inspection and diagnostic laboratories. Apart from an old 150 m³ fumigation chamber located in Freetown, not currently used, no other equipment or facilities for plant quarantine treatment, seed testing, or for destruction of seized goods exists. Likewise, there are no facilities for proper storage of goods under quarantine at any port of entry. There is an acute shortage of equipment; inspectors do not even have basic equipment such as lighting, hand lenses and knives to assist them in their work. Overall assessment rate is poor.

1.3 On-going and planned Programmes for Quality Assurance

In order to avoid duplication of efforts in the present proposal and to ensure synergy with on-going and planned efforts, the present proposal explored current projects in the SPS sector. It noted that the government of Sierra Leone has recognized the importance of SPS capacity for effective participation in international trade. Thus, the issues of improved SPS capacity figured prominently in Sierra Leone's Diagnostic Trade Integration Study (DTIS), endorsed by the Sierra Leone Cabinet in November 2006 under the Integrated Framework. A number of programmes are currently being implemented in Sierra Leone which seeks to address some SPS issues. These include the following:

- A proposed project on Rural Private Sector Development supported by the World Bank and jointly executed by the Ministries of Trade and Industry and Agriculture and Food Security, addresses SPS issues as part of value chain interventions for various agricultural products as a means for improving rural livelihoods and income, thereby addressing poverty reduction.
- At the sub-regional level, Sierra Leone is part of a programme supported by the US Agency for International Development (USAID) and coordinated by the West Africa Trade Hub (WATH). The programme seeks to support ECOWAS' efforts on regional integration by initiating a process of harmonisation of SPS systems across West Africa, covering UEMOA and ECOWAS countries. Under the programme, a study was conducted in September 2006 of the SPS capacity in Sierra Leone, which details the weaknesses in Sierra Leone's SPS infrastructure and institutional framework, and makes recommendations for strengthening and improving the institutional and human resource capacity.
- UNIDO has also undertaken a study in accreditation, conformity assessment, inspection, standardization, quality, metrology, and compliance with the WTO Agreements on TBT and SPS in the Republic of Sierra Leone – Analysis and propositions for a capacity building in these fields in the framework of the West Africa Quality Programme (ECOWAS and Mauritania (2006).

- The European Commission also undertook a study in the framework of the West Africa Quality Programme (ECOWAS and Mauritania). A mission of the United Nations Industrial Development Organization (UNIDO) visited the Republic of Sierra Leone. The objective of this mission was to evaluate the existing infrastructure and to identify the needs for support in the field of quality and the implementation of the WTO Agreements related to TBT and SPS. A proposed site for the planned laboratories has been identified and bills of quantities was prepared and submitted to UNIDO in Vienna. The Consultant proposed the establishment of four laboratories namely: Chemical Testing, Metrology, Pesticide and Residue testing as well as Petroleum testing. The SLSB is now waiting for approval from UNIDO to commence civil works and upgrading of the laboratories at an estimated cost of \$350,000.

The European Union (EU) is funding a STABEX programme in support of cocoa and coffee growers who are organized into Millennium Cocoa Growers' Cooperatives (MCGC) in the Eastern Province of Sierra Leone. MCGC is supported by the German NGO, Welthungerhilfe, which is implementing the EU funded project in the three Districts. Major activities include help to transport, materials like moisture meters, infrastructure (warehouses at chiefdom level) and an intensive training program for farmers. The latter is implemented together with the Ministry of Agriculture, Forestry & Food Security (MAFFS) and through Farmer Field Schools (FFS). Besides MCGC, Welthungerhilfe supports two other cooperatives with similar approaches in Eastern Province. Another additional benefit for farmers engaged in the cocoa sector will emerge from the certification for organic production. Through a partnership with Agro Eco – The Netherlands, which is presently in the country, preparations are being made to get the first 400 farmers registered and their produce organically certified; i.e. the production of cocoa and coffee without pesticides and inorganic fertilizer. Presently two chiefdoms are targeted: Kissi Tongi in Kailahun District and Gorama Kono in Kono District. Gorama Mende chiefdom in Kenema District will follow suit. In 2008, three cocoa containers of good quality cocoa were exported through Millennium Cocoa Growers' Cooperative (MCGC) to Europe. The Dutch company, Theobroma B.V. (formerly EDF & Man), is the largest buyer of cocoa and coffee from Sierra Leone. The quality of the cocoa exported by MCGC is the best that the company has received since the end of the war in 2001. The average defect percentage of beans was below 10%, whereas the country average of defects is about 25%. The moisture content was also according to international standard, which is about 7%. Though there was still a discount from the world market price, the cooperative believes that through the efforts on improvement of quality, Sierra Leonean cocoa could become more valued in the next years. Another six containers are expected to be exported by MCGC within the present season.

Programmes currently addressing SPS issues in Sierra Leone are diverse and although their design may complement each other, their execution may risk duplication and/or the appearance of gaps. The proposed project is designed to address in a systematic manner the issues identified by the various studies and establish a coordinated and strategic approach to SPS capacity building in Sierra Leone into the future. The project will seek to build on the current efforts underway in Sierra Leone and provide the foundation for future intervention by both government and its development partners to sustainably build capacity on SPS infrastructure and institutions in the country.

Both the DTIS and the WATH¹ SPS study on Sierra Leone identified the issue of compliance with quality and SPS standards as key issues for the main agricultural products exported by Sierra Leone. This is important to ensure consensus among stakeholders on priorities and the respective responsibilities of different officials and private entities. Sierra Leone desires to facilitate the emergence of a standards

¹ USAID West Africa Trade Hub September 2006: SPS Capacity in Sierra Leone Technical Report No. 14, Accra Ghana. <http://www.watradehub.com>

infrastructure over the medium term that supports export diversification into new high value added products where standards are the key factors influencing market access. Sierra Leonean exporters of new products will require internationally recognized conformity assessment services for testing, inspection and certification.

The proposed project will seek to address several of the recommendations in the SPS study, and would directly implement prioritized activities on SPS outlined in the Action Matrix of the DTIS which proposes a strategic approach to the entirety of SPS issues in Sierra Leone. The project's activities would lay the groundwork for the development of that infrastructure by specifically building capacity within the SLSB, other line ministries and the private sector for SPS compliance and implementation. Training needs will be systematically analysed and the resultant training specifically targeted and coordinated.

2.0 PROJECT OBJECTIVES AND ACTIVITIES

2.1 Project Objectives

This request for Donor grant assistance is being made to enhance the capacity of key public and private sector organizations in Sierra Leone to meet international phyto-sanitary standards, increase market access for agricultural products particularly cocoa and coffee and protect human health.

Specific objectives include:

- I. Improve capacity of CPS, SLSB and Njala University for standards setting for cocoa and coffee as well as capacity for special analysis.
 - a. Improve legal framework by reviewing the laws
 - b. Establish standards for cocoa and coffee
 - c. Improve documentation
- II. Train both private and public sector on cocoa and coffee and other agro products quality control in Sierra Leone.
 - a. Undertake study to identify Critical Control Points for cocoa and coffee along the value chain
 - b. Train public sector staff in field pest and disease control, inspection and phyto-sanitary control
 - c. Train private sector in HACCP, GAP, EurepGAP
 - d. Provide hands on training for selected staff from PIU, CPS with Ghana COCOBOD and Coffee Association of Cote d'Ivoire
- III. Improve laboratory capacity for SLSB, NJALA University, and CPS
 - a. Establish field mobile plant health clinics
 - b. Provide Equipment and expand Laboratory facilities
- IV. Build capacity of Trade Officials and other government officers in Inter-agency collaboration and management of SPS information

2.2 Overall Project Management

General Coordination

The Ministry of Trade and Industry is the Lead Agency and will be responsible for the administration and coordination of grant funds allocated by the donors. The Permanent Secretary will be responsible for requesting funds from donors and disbursing the respective share of funds to the implementing institutions and monitor their use. Funds will be lodged into a special account to be set up for the purpose of the project and controlled by the PS. This Ministry has managed donor funds for similar projects in the past and has the required experience.

Scientific Coordinator

Scientific coordination will be performed by the Head of the Crop Protection Services of the Ministry of Agriculture of Sierra Leone and assisted by Director of Standards of the S L Bureau of Sierra Leone. The

two will assist the General Coordinator in the follow-up, planning, progress reporting and result dissemination of the scientific activities.

The head of CPS and Director of SLSB participated in the preparatory project planning workshops held at Freetown in February 2008 for this project and made immense contributions.

Project and related information exchanges will be performed at two levels:

1. Between project coordinators and participating organizations:
Day-to-day information exchange regarding project activities, decisions, scientific information, reporting, financial transactions and meetings will be done mostly through Internet e-mail services. This will be supplemented by project meetings and workshops.
2. Between the overall project coordinator and financiers (STDF partner institutions):
Information on administrative and financial management matters and technical reports will also be shared between the General Coordinator and the donor as per the donor's reporting requirements.

2.3 Project Components and Activities

The project has four proposed components:

Component 1

This component responds directly to Objective I of the project namely *“Improve capacity of CPS, SLSB and Njala University for standards setting for cocoa and coffee as well as capacity for special analysis.”*

- a. Improve legal framework by reviewing the laws
- b. Establish standards for cocoa and coffee and improve documentation on standards
- c. Improve capacity of Notification and Enquiry Points

Activity 1

Engage a competent Consultant to review the legal framework for the Crop Protection Services and SLSB to be in line with international norms. This will involve review of the draft Plant Quarantine legislation for consistency with the IPPC (ISPMs) and the agreement on the application of WTO-SPS and developing a Pesticide Legislation to establish and implement a system for the control of imports, labelling and distribution of pesticides within the country and to be consistent with ECOWAS regional harmonization system. The review and updating of the laws will take an estimated 2 months and the entire process to passing of the bill is estimated to take a year.

- i. Prepare TOR of consultant and procure services -1 months
- ii. Field Work by Consultant and production of report - 2 man months
- iii. Review of draft legislation by Departmental Heads, Minister and Cabinet - 1 month
- iv. Passing new legislation in parliament
- v. Implement the new legislation (sensitizing the farmers/producers/exporters/ Government agencies) other stakeholders.

Table 1: Estimated cost for Updating Legal Framework and Producing Pesticide Law

Item/Activity	Estimated Costs US \$		
	Donor	Govt of Sierra Leone	Total
Air travel (return) of Consultant	6,000	-	6,000
Hotel, Boarding & Lodging @US\$200 per day x 25 days	5,000	-	5,000
Consultant Fees (2 months) @ US\$10,000 for update of legal framework	20,000	-	20,000
Consultant Fees (2 months) @ US\$10,000 for producing draft Pesticide Law	15,000	-	15,000
Field transport costs of consultants	-	6,000	6,000
Cost of workshop to review draft legislation		8,000	8,000
Sensitization of farmers, collectors and exporters and stakeholders	40,000		40,000
Total	86,000	14,000	100,000

Deliverables

- Draft Legislation prepared by **month 2** of project
- Draft Pesticide Law prepared by **end of month 4**

Milestones and Expected output

At the end of the project's lifespan, the following are expected to be achieved:

- A Plant Quarantine Act conforming to the IPPC, WTO-SPS and other international treaties including ECOWAS is prepared and passed by parliament
- A Pesticides Act including ECOWAS pesticides regulations enabling effective control within the country is prepared and passed by parliament.

Activity 2

Establish standards for cocoa and coffee and improve documentation on standards. This will involve mainly the efforts of SLSB in meetings of the committee on standards and researching standards and communicating with Codex Alimentarius Commission.

Table 2: Cost Schedule for Review, Updating and Disseminating Cocoa and Coffee Standards

Item/ Activity	Estimated Costs US \$		
	Donor	Govt of Sierra Leone	Total
Consultant Fees 10 days@ US\$500	5,000	-	5,000
Meetings of committee	-	4,000	4,000
Dissemination of standards to producers, collectors and exporters	40,000		40,000
Total	45,000	4,000	49,000

Deliverables

- Report of committee submitted on proposals for ensuring quality standards for cocoa and coffee by **month 4** of the project.

Milestones and Expected Outputs

- Quality standards established in conformity with international standards and published for cocoa and coffee by **month 12** of the project.

Activity 3

Improve access to information from Notification and Enquiry Points within the CPS. The Ministry of Agriculture already has a dedicated website with a home page for Pest Control Services. However funds are required for uploading of new information and regular edit of the site as well as internet connectivity for the PCS. Budget estimated covers dedicated internet lines as well as procurement of computers, printers and other accessories.

Table 3: Cost Schedule for Establishing Notification and Enquiry Points

Item/ Activity	Estimated Costs US \$		
	Donor	Govt of Sierra Leone	Total
Computer Hardware	15,000	-	15,000
Maintenance	8,000	-	8,000
Total	23,000	0	23,000

Deliverables

- Report on website upload and recommendations for improving accessibility of Notification and Enquiry Points

Milestones

- Notification and Enquiry Points equipped and operational
- Dedicated internet service and website maintained

Component 2

This component corresponds with Objective II of the project *'Train public sector officials on cocoa and coffee and other agro products quality control in Sierra Leone'*.

Activity 1

Undertake a study to identify Critical Control Points for cocoa and coffee along the value chain

It is proposed that Njala University undertakes the study. A total of 2 man months is allocated to this activity.

Estimated costs include:

Table 4: Cost Schedule for Undertaking Study on HACCP

Item/ Activity	Estimated Costs US \$		
	Donor	Govt of Sierra Leone	Total
Per diem Boarding & Lodging for a team of 4 for 25 working days @\$125	12,500	-	12,500
Honorarium for report preparation \$3,000 x 4 consultants	12,000	-	12,000
Workshop to present the results	10,000		10,000
Total	34,500		34,500

Activity 2

Training for Public Sector Officials:

Sierra Leone as a member of WTO would request for national training of its public sector staff to be held in Freetown. A total of 50 staff will be provided a two-day training on WTO SPS Agreement with a budget as contained in table 6. Participants will be drawn from the Produce Inspection Unit, Crops Protection Services, Sierra Leone Standards Bureau and Sierra Leone Investments and Exports Promotion Agency (SLIEPA).

Table 5: Cost Schedule for Training Public and Private Personnel on WTO SPS Agreement

Item/ Activity	Estimated Costs US \$		
	Donor	Govt of Sierra Leone	Total
Conference room hire, snacks, lunch etc for 50 participants @US\$30 per participant for 2 days		5,000	5,000
Stationery and printing		500	500
Total		5,500	5,500

Activity 3**Local Training for Private and Public Sector in HACCP, GAP and EurepGAP**

Training will be undertaken through a joint effort of CPS, SLSB and the Njala University and held in Freetown. Fifty officials selected from both private and public sector will be identified and trained in HACCP, GAP and EurepGAP. Participants will be drawn from the Produce Inspection Unit, Crops Protection Services, Sierra Leone Standards Bureau and Sierra Leone Investments and Exports Promotion Agency (SLIEPA). Private sector participants will include representatives of cocoa and coffee farmers associations, handlers and exporters associations.

Table 6: Cost Schedule for Local Training in HACCP, GAP, EurepGAP and ISO

Item/ Activity	Cost Estimates US \$		
	DONOR	GOS	Total
5 day training workshop for 50 public and private sector operatives @\$20 (snacks and lunch)	5,000	-	5,000
Cost of workshop venue @ \$200 x 5 days	-	1,000	1,000
Out of Station allowance for 50 participants @\$20 x 5 days	5,000		5,000
Workshop materials	4,000	-	4,000
Honorarium for 4 Trainers @ 500	2,000	-	2,000
Training in ISO	11,000	-	11,000
Contingency	1,000	-	1,000
Total	28,000	1,000	29,000

Activity 4 a**Undertake Hands on training for selected Public Officials from PIU, CPS with Ghana COCOBOD**

Ghana has a well organised Cocoa Marketing System with adequate quality control system. It is proposed that a team of six staff from the PIU, CPS and the SLSB undertake a two weeks (14 days including 2 days travel time) working visit to Ghana COCOBOD. The purpose will be to have hands on training on various processes and activities. A request will be made to COCOBOD and Memorandum of Understanding

Table 7: Hands on Training for Public Officials with Ghana COCOBOD

Activity	Cost Estimates \$		
	Donor	Govt Sierra Leone	Total
Two weeks hands on training for 6 staff of PIU and CPS and SLSB			
• Return Air tickets \$750 x 6	4,500		4,500
• Per diem, boarding and lodging \$200 x 14 days x 6	16,800	-	16,800
• Misc.	2,000	-	2,000
Honorarium for trainers \$5,000 for 2 consultants	10,000	-	10,000
TOTAL	33,300		33,300

Activity 4bUndertake Hands on training for selected staff from PIU, CPS with Coffee Association Cote D'Ivoire

Cote d'Ivoire has a well organised Coffee marketing system with adequate quality control system. It is proposed that a team of six staff from the PIU, CPS and the SLSB undertake a two weeks (14 days including 2 days travel time) working visit to Cote d'Ivoire. The purpose will be to have hands on training on various processes and activities.

Table 8: Hands on Training for Public Officials with Cote d'Ivoire Coffee Association

Activity	Cost Estimates \$		
	DONOR	Govt Sierra Leone	Total
Four weeks hands on training in CI for 6 staff of PIU and CPS and SLSB			
• Return Air tickets \$750 x 6	4,500	-	4,500
• Per diem, boarding and lodging \$200 x 14 days x 6	16,800	-	16,800
• Misc.	2,000		2,000
Honorarium for trainers \$5,000 for 2 consultants	10,000	-	10,000
TOTAL	33,300	-	33,300

Deliverables

- Group to produce training report

Component 3

This corresponds with objective 3 of the project 'Improve laboratory capacity of SLSB and NJALA University, Improve Inspection Equipment for CPS and provide Test Kits for PIU.'

Activity 1**A) Provide Field Test Kits to Produce Inspection Unit**

Test kits and simple inspection tools and equipment will be provided to the Produce Inspection Unit to improve quality of tests performed for aflatoxin and other contaminants at collections points, storage houses and other critical points identified along the value chain. EnviroLogix offers an

innovative line of mycotoxin diagnostics. QuickTox™ for Aflatoxin offers a fast, reliable and easy method for screening seeds for this toxin at the 20 ppb and 10 ppb levels. The test gives an accurate “yes/no” result within 2-5 minutes, providing convenience where simplicity and speed are vital for segregating seeds. Aflatoxin is considered to be the most potent, naturally-occurring carcinogen known to affect both humans and animals. .

An estimate of **\$10,000** is made for the purchase of the test kits.

B) Provide Inspection Equipment at Entry/Exit Points for Staff of Crops Protection Services

The CPS staff at border entry points will also be provided inspection kits to improve the quality of their inspection at entry and exit points.

Table 9: List of Equipment for each Phyto-sanitary station (x6 stations)

1.	Pooter	4
2.	Glass tubes	20
3.	Brushes	1doz
4.	Binocular microscope	1
5.	Hand lenses	4
6.	Hypodermic syringes	20
7.	Insect vials	50
8.	Insect cabinet	1
9.	Inspection kits	3
10.	Microscope slides & lens cleaners	2
11.	Pairs of scissors	2
12.	Sample grinder	2
13.	Sampling tubes	4
14.	Scalpels (blades & holders)	2
15.	Solvent degasser	1
16.	Squeeze bottles	4
17.	Table magnifiers	2
18.	Digital thermometers	1
19.	Typewriter	1
20.	Fumigation equipment	1set

The total value of the hand tools and equipment is estimated at **\$15,000** for the six stations of the project.

C) Improve Laboratory Capacity of SLSB and Njalah University

The project intends to improve laboratory capacity of The Njala University in order to complement services provided by the Sierra Leone Standards Bureau, which is presently being assisted under a UNIDO programme.

The Njalah University presently lacks capacity in the area of standards and conformity assessment and has difficulties assisting producers to meet international market requirements in terms of risk analysis. A priority area identified by the project is to assist the Njala University in meeting basic conformity assessment by providing basic laboratory equipment. The upgrading of testing capabilities and its qualification as competent authority by international bodies to serve the sectors of high export potential is one of the desired outputs of this project.

The project therefore intends to supply basic laboratory equipment to meet the testing requirement of the internal market for identified export products of high potential. Products identified by major

studies are: cocoa, coffee, ginger, palm oil, cashew, fishery products, and black eye bean, and chilly pepper, there is also a high demand from the breweries for sorghum. Factors considered for the selected products have been based on world demand, competitiveness, income generation, linkage opportunities.

Equipment Required by Njala University

Njala University will undertake study on critical points for aflatoxin control along the value chain for cocoa and coffee. The following equipment will be required by Njala University to effectively participate in the project:

Table 10 A: List of Laboratory Equipment and Reagents at Njala University

No	Item	Quantity	Catalogue no	Price \$USD	Price \$USD
	Equipment				
1	Quality laboratory incubator	4	SK Science kit and Boreal laboratories - WW6483500	359.00	1,436.00
2	CP Compound Microscope with built in digital cameras	1	Cole- parmer Canadian catalogue	1,957.97	1,957.97
3	Stereo microscope	2	Professional equipment	372.00	744.00
4	Versatile Kjeldahl K- 355 distillation unit	2	Buchi corporation 043505	10,000	20,000.00
5	Rossel Screen house	2		10,000	20,000.00
6	Horizontal lamina Flow hood (3ft wide)	2	Angstrom technology ltd	3,732	7,464.00
7	Stand for Horizontal lamina Flow hood (3ft wide)	2	Angstrom technology ltd	300	600.00
8	Aflotoxin test kit	2		500	1,000.00
9	Ultra violet box	2	Coleparmer	247	494.00
10	Ultra violet led light with 21 UV led (395nm)	2	Coleparmer	105	210.00
11	Goggles	4	Labsco - 9.005161	100	400.00
12	Double trough TLC chamber (tank)	4	Labsco - 9.020113	200	800.00
13	TLC Plates	20	Thomas scientific	180	3,600.00
14	Haemocytometer	4	Change Bio Science .com QJ 1102	50.00	200.00
15	E276 folding hand lens illuminated	4	Australian Entomological Supplies Pty. Ltd. (20x magnification, 18mm)	41.80	167.20
16	Aspirator	6	Blue Spruce Scientific supply BSO40828	9.75	58.50
17	Ph meter	1		1,000	1,000.00
18	Colony counter	1		1,000	1,000.00
19	Whatman filter paper	10 boxes	1001-125 (12.5cm)	6.95	69.50
20	Sweep net	2	Acorn Naturalists T-5197 (12inc. aerial)	18.95	37.90
21	Para film paper	4 rolls	Parts Hangar 254185	29.63	118.52
22	Capillary tubes	6 pack	Parts Hangar Fis 22362574	12.58	75.48
23	Multi pipette channels tips	1box (1,000)	Thomas scientific	90.00	90.00
24	McCartney bottles	4 Pack of six	03.03.20150	31.5	126.00
25	Thermometer	4	Pacific science supplies	1.49	5.96

			WW73602		
26	Microscope cover slip and slide	10 set	Wild goose company products (length 7.7cm width 2.6cm)	4.99	49.99
27	Contingency				10,000
SUB TOTAL					71,660.02

Equipment Required by the Sierra Leone Standards Bureau

The following equipment will be required by the Sierra Leone Standards Bureau to effectively participate in the project:

Table 10 B: Laboratory Equipment Needs for Sierra Leone Standards Bureau

No	Item	Quantity	Catalogue no	Price \$USD	Price \$USD
Equipment					
1	Quality laboratory incubator	2	SK Science kit and Boreal laboratories - WW6483500	359.00	1077.00
2	CP Compound Microscope with built in digital cameras		Cole- parmer Canadian catalogue	1,957.97	391.94
3	Stereo microscope	2	Professional equipment	372.00	744.00
4	Versatile Kjeldahl K- 355 distillation unit	2	Buchi corporation 043505	10,000	10,000
5	Rossel Screen house	2		10,000	20,000
6	Horizontal lamina Flow hood (3ft wide)	2	Angstrom technology ltd	3,732	7,464
7	Stand for Horizontal lamina Flow hood (3ft wide)	2	Angstrom technology ltd	300	600
8	Aflotoxin test kit	2		500	1,000
9	Ultra violet box	2	coleparmer	247	494
10	Ultra violet led light with 21 UV led (395nm)	2	coleparmer	105	210
11	Goggles	4	Labsco - 9.005161	100	400
12	Double trough TLC chamber (tank)	4	Labsco 9.020113	200	800
13	TLC Plates	20	Thomas scientific	180	3600
14	Haemocytometer	4	Change Bio Science .com QJ 1102	50.00	200.00
15	E276 folding hand lens illuminated	4	Australian Entomological Supplies Pty. Ltd. (20x magnification, 18mm)	41.80	167.2
16	Aspirator	6	Blue Spruce Scientific supply BSO40828	9.75	58.5
17	Ph meter	1		1,000	1,000
18	Colony counter			1,000	1,000
19	Whatman filter paper	10 boxes	1001-125 (12.5cm)	6.95	139.00
20	Sweep net	2	Acorn Naturalists T-5197 (12inc. aerial)	18.95	75.8
21	Para film paper	4 rolls	Parts Hangar 254185	29.63	118.52
22	Capillary tubes	6 pack	Parts Hangar Fis 22362574	12.58	75.48
23	Multi pipette channels tips	1box (1,000)	Thomas scientific	90.00	90.00
24	McCartney bottles	4 Pack of	03.03.20150	31.5	126

		six			
25	Thermometer	4	Pacific science supplies WW73602	1.49	5.96
26	Microscope cover slip and slide	1 set	Wild goose company products (length 7.7cm width 2.6cm)	4.99	49.9
SUB TOTAL					42,430.764

In addition to the above equipment, it will be necessary to train staff in identifying and quantifying mycotoxin producing fungi as well as handling of produce particularly in laboratory analysis and improved international standards.

Deliverables

- Equipment for field mobile clinics procured and installed by end of **12 months** of project
- Inspection and laboratory equipment procured, installed and operational by end of **month 12**

Milestones

- Plant doctors trained for running of mobile plant clinics at district level
- Mobile plant clinics established and supported for effective and continuous operation in the field
- Laboratories fully equipped to undertake specialised analysis

Component 4

This responds directly to objective 4 which states “*Build capacity of trade officials and other government officials in inter-agency coordination and management of information on SPS issues*”.

Activity 1

Establish Project Coordination and Monitoring

This involves organizing and implementing project meetings and workshops during the duration of the project. Four major meetings are planned as follows: start-up meeting, first workshop, mid-term progress meeting, and a final end of project evaluation workshop. These will be undertaken to coordinate the implementation and execution of project activities by the different partners as well as follow-up progress of project activities to ensure the effective execution of the work plan, review of the scientific results and possible bottlenecks to be solved.

The following activities are planned to accomplish the above objective.

Start up Meeting

A two days kick off meeting will be organized at Freetown at the beginning of the project with the participation of key representatives of the project partners. The objective of this meeting is to plan and organize the implementation and execution of the project activities by the different partners, including administrative, financial and scientific issues.

The kick-off meeting will be preceded by a one day workshop aiming to synthesize and discuss the current context of the Sierra Leone SPS System, the results and conclusions of the main research work that has been carried out up to now on the topic and the research and development projects in progress. This workshop that will involve the project partners and other key stakeholders and entities of the public and private sector, will be the opportunity for the different teams to meet and enhance their knowledge of their respective activities.

The General Coordinator and the Project implementation Agency will be responsible for organising the capacity building of the Sierra Leone Public and Private sectors. They will prepare a detailed Terms of Reference (TOR) for capacity building program and will procure the services of one of these partner organizations with a track record in capacity building in food safety and standards; UNIDO will be contacted in the areas of standards development; WHO in the field of food safety training of inspectors; FAO will be contacted on the fields of EurepGAP and traceability. Other renowned institutions will be called upon to participate in areas such as those relating to HACCP and ISO series (9000, 22000 and 14,000) training.

Consulting services will be procured, for ISO series, WTO, and Traceability system. The composition of each consulting team will reflect a multi-disciplinary team with relevant competences including ISO 9000, 22,000 and 14,000, traceability, labelling, post-harvest technology, agronomy, food science, quality and safety management in food production chain. WTO will be contacted to provide capacity building in the areas of WTO SPS/TBT Agreement to government officials in charge of trade.

The Ministry of Trade and Implementing agency will sign a contract agreement for consultancy services and release of funds as per schedule in contract agreement.

The Implementing Agency will exercise oversight control over field work of consultants by reviewing the inception report, reviewing the draft and final reports and consulting with international partners.

Mid-term progress meeting

At the mid point of the project, a two day progress meeting will be organized at Freetown with the participation of the project partners and stakeholders of the Sierra Leone food production chain that have been involved in the project activities. This meeting is aimed to follow-up on progress of the activities and evaluate the effective execution of the work plan, to reinforce the knowledge of the Sierra Leone Food production situation between participants and if necessary to agree on adjustments to the direction of capacity building. The scientific and technical results will be reviewed, analyzed and interpreted and solutions to the possible production chain bottlenecks discussed. Administrative and financial issues will also be addressed.

Final end of project workshop with the participation of key stakeholders

The Third Party to be selected by the project will assist the project in preparing an end of project report, identifying milestone achievements including project impact on food quality, initial impacts of increased exports, lessons learned, and strategies for sustainability of project key activities in ensuring food quality in Sierra Leone.

A three day final workshop will be organized at the end of the project with the participation of all the project partners, and other key stakeholders of the Sierra Leone food production chain. The objective of this workshop is aimed to disseminate and report all the results and conclusions generated by the project to Government and international community. The participation of a European Commission expert and a representative of the STDF partner institutions is planned. Two days of demonstration sessions on the safety management tools, tested and validated during the project will be organized.

All the meetings and workshops will stimulate networking between the projects participants and contribute to strengthen the public-private dialogue and partnership in Sierra Leone food production chain.

Ex- Post Evaluation

The project makes provision for an ex-post evaluation of the project at the end of year 3 in order to assess the impact of the project on quality of produce exported, the situation with respect to rejection of consignments as well as the impact on foreign exchange earned from export of cocoa and coffee.

Deliverables

- Report on Start up meeting and first workshop **by month 2.**
- Report on Mid-term progress meeting **by month 13.**
- Report on Final end of project evaluation workshop **by month 23.**

Milestones and expected results

Table 11: Budget for Project Coordination

	<u>Project Coordination Meetings</u>		Total	Donor	GOS
4.1	Start-up meeting for 20 participants @ \$200 x 2 days	Number	8,000	8,000	-
4.2	Local Transport for distant participants	Number	2,000	2,000	-
4.3	Mid-term progress meeting x 20 participants @ \$200 x 2 days	Number	8,000	8,000	-
4.4	Project Completion Evaluation meeting x 20 participants @ \$100 x 2 days	Number	4,000	4,000	-
4.5	Preparation of end of project report	Lump sum	2,000	2,000	-
4.6	Hire of conference room and misc coordination expenses	Lump sum	15,000	15,000	-
4.7	Remuneration of Project Coordinator @ \$1,500/month	Month	36,000	36,000	
4.8	Remuneration of Scientific Coordinator @ \$1,500/month	Month	36,000	36,000	
4.9	Remuneration of Project Accountant @ \$700/month	Month	16,800	16,800	
4.10	Remuneration of 20 institutional part time staff @ \$300/month	Month	144,000	-	144,000
4.11	Stationery, office equipment misc	Lump sum	5,000	-	5,000
4.12	Ex- post Evaluation costs	Lump sum	15,000	15,000	
	TOTAL FOR COMPONENT 4		291,800	142,800	149,000

Project Sustainability

The project is expected to end after two years of implementation. It is the responsibility of the Ministry of Trade to work out an exit strategy and sustainability plan to ensure that gains made during project implementation are sustained even after project closure and expiration of donor funds. Inspections and phyto-sanitary certifications usually attract fees that are payable into the consolidated fund. Part of this fund could be used to ensure that key equipment and tools are maintained and replaced and to ensure sustainable quality services.

3.0 BUDGET AND PROPOSED USES OF DONOR GRANT FUNDS

The total cost of the proposed project amounts to **US\$ 696,060** out of which Grant Funds requested from **DONORS amounts to US\$ 522,560 representing 75% of total cost**. The Republic of Sierra Leone will be responsible for a total cost of US 173,560 representing 25% of total cost mainly in the form of remuneration to full time and part time officers involved in the implementation of the project. Detailed cost tables are shown in table below:

Table 12: Summary of Project Costs by Donor and by Government of Sierra Leone

BUDGET IMPROVING SIERRA LEONE FOOD SAFETY PHYTOSANITARY CAPACITY				
	COMPONENT 1	TOTAL	DONOR	SIERRA LEONE
	Improving capacity for standards setting for cocoa & coffee			
1.1	Consultancy to review legal framework for Plant Quarantine	100,000	86,000	14,000
1.2	Establish standards for Cocoa & Coffee and disseminate standards	49,000	45,000	4,000
1.3	Improve capacity of Notification & Enquiry Points	23,000	23,000	0
	sub-total	172,000	154,000	18,000
	COMPONENT 2			
	Capacity Building & Training for Public & Private sector officials			
2.1	Study on Critical Control Points for cocoa and coffee	34,500	34,500	0
2.2	Training Public & Private sector on WTO SPS Agreement	5,500	0	5,500
2.3	Local Training in HACCP, GAP, EurepGAP, ISO	29,000	28,000	1000
2.4	Hands On Training in Ghana on cocoa quality assurance	33,300	33,300	0
2.5	Hands On Training in Cote d'Ivoire on coffee quality assurance	33,300	33,300	0
	sub-total	135,600	129,100	6,500
	COMPONENT 3			
	Improve Laboratory Capacity for Njala University and CPS			
3.1	Provide field test kits for PIU	10000	10000	0
3.2	Provide field test kits for 6 CPS stations	15000	15000	0
3.3	Expand capacity of Laboratories at Njala University	71,660	71,660	0
	sub-total	96,660	96,660	-
	COMPONENT 4			
	Build Capacity of Trade Officials in inter agency coordination and management of SPS information			
4.1	sub-total	291,800	142,800	149,000
	TOTAL FOR COMPONENTS	696,060	522,560	173,500
	Percentage Cost Sharing		0.75	0.25

ANNEXES

Description of Team Members, Role of Project Partners and Letters of Support from Local and International Collaborating Organizations:

1.1 Introduction

This request for donor assistance is being made to enhance the capacity of key public and private sector organizations in Sierra Leone to meet international phyto-sanitary standards, increase market access for agricultural products particularly cocoa and coffee, and protect human health.

Core Group:

The core group comprises the Ministry of Trade and Industry, Sierra Leone Standards Bureau (SLSB), Produce Inspection Unit (PIU), Crop Protection Unit (CPS), Njala University and the Ad Hoc Committee on Cocoa and Coffee marketing. The grant request will benefit directly these organizations through budgetary provisions made from the donor grant over a period of two years.

Collaborating Partners:

These include the Sierra Leone Chamber of Commerce, Sierra Leone Investments and Export Promotion Agency (SLIEPA), Sierra Leone Business Forum, Producers Association and the Department of Agricultural Extension Services; these organizations will not benefit directly from the donor grant but participate in training, awareness and capacity building programmes and collaborate with the core partner group in implementing key project activities.

The two categories of partner organisations will offer strong and complementary set of expertise, experience and research on the subject matter as well as human and material resources needed for the implementation of the project.

1.2 Description of Each Core Partner Institution and Expected Roles

Ministry of Trade and Industry

This Ministry is the lead agency for the project.

Table 1: Résumé of Key MoTI Staff Involved in the Project

Name	Educational Level/Function	Field of Expertise related to the project	Project Responsibilities
Mrs Isatu Mustapha	MBA	Business Administration and Project management	Permanent Secretary and overall Head
Mrs Princess M. Jah	BSc Finance	Accountant	Accounting

Sierra Leone Standards Bureau (SLSB)

The Standards Act 1996, Act 2 established The Sierra Leone Standards Bureau (SLSB) and the National Standards Council (NSC). The Act also provides for the standardization of commodities and products in conformity with established national standards.

The Act in Part II section 4, subsection (1) provides the legal mandate to The Sierra Leone Standards Bureau to set standards, regulate and control the manufacture, import, export, distribution, advertisement, sale and use of foods and chemicals. It is also empowered as the national agency for the registration and certification of packaged, processed or semi processed food commodities for export. Although principally concerned with laboratory analysis and verification of constituents the SLSB also promotes Good

Manufacturing Practices (GMP) as well as Hazard Analysis of Critical Control Points (HACCP) on the basis of ISO standards.

The National Standards Council of the Sierra Leone Standards Bureau (SLSB) has approved the adoption of the Codex Alimentarius Commission (CAC) as food standards for Sierra Leone. The SLSB is the Codex Contact Point. The Bureau presently has three main technical committees: (a) The National Codex Committee, (b) Industrial Standards, and (c) the Metrology Committee. Each committee bases its standards on those of international standards organizations such as CAC, ISO, IEC, ARAS and other standards from older reputed standards institutions such as BSI AFNOR, DIN, SEN.

Under the proposed project, the capacities for standards development, testing, certification and accreditation will be improved particularly for cocoa and coffee.

Table 2: Résumé of Key SLSB Staff Involved in the Project

Name	Educational Level/Function	Field of Expertise related to the project	Project Responsibilities
Francis Palmer	BSc. Biological Sc.	Food Inspection, Microbiological testing, Food Safety	Testing, Sensitization,
Karim Sankoh	BSc Chemistry , Botany	Food Inspection, Microbiological testing, Food Safety, Chemical testing	Testing, certification
Tamba Kamanda	BSc. Biological Sc.	Quality inspection, Quality management system	Certification, System implementation, compliance, audit
Amadu Jogor Bah	BSc. Botany, MBA	Adoption and harmonization to International standards	Legal framework, harmonization
David Conteh	BSc, Chemistry, M.Sc. Chemistry	Laboratory analysis	Testing, lab analysis chemical testing

Contact Person: The Director of Standard Bureau
 Ag Head of Standards
 E-mail slsb2009@yahoo.com
 Tel no: 00232-783340134/30218487

Produce Inspection Unit (PIU)

The Produce Inspection Rules, an ordinance established under the Agricultural Act. CAP 185 of the Laws of Sierra Leone in 1946 and updated over the years till 1974, is the Statutory Instrument mandating the inspection of all agricultural export crops. The Produce Inspection Unit certifies products on a standard 3% sample for quality, weight, fumigation and packaging (QWFP). The PIU has stations located in key agricultural production centers or regions in Sierra Leone. Through its certification system it provides some element of traceability of produce to warehouses of storage and source of production. It also assigns country of origin certification and links exporters to the Sierra Leone Export Promotion Council through the QWFP certification system. The PIU has the mandate for quality assurance for cocoa and coffee.

The Quality Assurance process/ system applied involves inspection, grading, sealing and certification. These are performed by the Produce Inspection personnel and also verified by personnel from both the Ad

Hoc Committee and Sierra Leone Standards Bureau in order to certify the fitness of any commodity under a system of checks and balances.

Sierra Leone operates two quality standards – Good Fermented Cocoa (GFC) and Fairly Fermented Cocoa (FFC). Any grading specification not within these two categories is considered as sub-Standard. Additionally, provision is made for re-examination of produce after the expiration of fourteen days from the original date of grading until it is shipped. Produce Inspection personnel operating all over the country check on farmers to ascertain the level of compliance with quality standards and do preliminary inspections and test to determine the fitness before crops are evacuated to Freetown (the port) for final grading. In all, the application of processes outlined above provides a means for quality assurance.

Key constraints involved in ensuring quality of cocoa, coffee and other agricultural products for exports include; (a) lack of mobility for effective supervision at regional, district and station levels, (b) inadequate grading equipment such as hammer presses, closing pliers, moisture meters, seals etc. (c) inadequate office equipments and stationery for data processing and reporting e.g. computers, printers and other logistics including rain gear.

Under the proposed project, the PIU will collaborate with SLSB in implementing a national traceability system that will enhance Sierra Leone's export to international markets specifically the EU market.

Table 3: Résumé of Key Staff of PIU involved in project

Name	Educational Level/Function	Field of Expertise related to the project	Project Responsibilities
Aroun Rashid Kamara	B.Sc Agric,	Produce inspection	Training of farmers, private sector buyers, exporters, Traceability, Training (Gap)
Christopher Alpha	HND Agric	Produce inspection	Training of farmers, private sector buyers, exporters(Traceability Training Gap)
Mohamed A. Kargbo	Certificate in Agric.	Produce inspection	Exporters(Traceability Training of farmers, private sector buyers, exp Training Gap)
Mohamed Sesay	Certificate in Agric.	Produce inspection	Training of farmers, private sector buyers, exporters(Traceability Training Gap)
Frank J Massaquoi	GCE – O'level Regional In-service training	Produce inspection	Training of farmers, private sector buyers, exporters(Traceability Training Gap)

Ad Hoc Committee for Cocoa and Coffee Marketing

Sierra Leone has closed its Produce Marketing Board and in 2002, the government constituted an Ad Hoc Committee as the Regulatory Body to handle the buying, sale and export of all agricultural export crops. Under the project, it will be important to spell out clearly the mandate of the body and its relationship with other stakeholder institutions.

Crop Protection Unit (CPS)

The Crop Protection Unit of the Ministry of Agriculture is mandated to carry out phyto-sanitary inspections, treatments and certification of plants and plant products for export, and conforms to the requirements of the International Plant Protection Convention (IPPC) and the WTO Agreement on SPS.

Under the proposed project, the Pest Control section of the Crop Protection Unit of the Ministry of Agriculture in collaboration with the Agricultural Extension Services will be tasked to ensure that farmers are educated and trained in effective control of diseases and pests that affect cocoa and coffee in the field. Mass spraying of cocoa and coffee against pandemic and pathogenic diseases such as the cocoa necrosis virus, swollen shoot virus, and cocoa Blackpod disease *Phytophthora palmivora* will be undertaken. The Unit will also train farmers and produce collectors and private produce buyers in best practices of fermentation and drying, moisture control, rodent control and reduction of post-harvest losses. Its phyto-sanitary Control Unit will be responsible for inspection and issuing of the final phyto-sanitary certificate for the export of cocoa and coffee and any other agricultural products to be exported from Sierra Leone.

Table 4: Résumé of Key Staff of Crop Protection Services Department involved in project

	Name	Educational Level/Function	Field of Expertise related to the project	Project Responsibilities
1	I. M. O. Shamie	PhD (Head of Crop Protection)	Entomology/Phytosanitary/IPM	Policy issues, overall responsibilities of the Crop protection services
2	James D. Spencer	Assistant, Post Graduate Diploma	Phytosanitary/IPM	Assisting Head of crop protection
3	Abu Bakarr Kamara	District Head, Post Graduate Diploma	Phytosanitary/IPM	Responsible for district crop protection activities
4	Harold S. Sesay	District Head, Post Graduate Diploma	Phytosanitary/IPM	Responsible for district crop protection activities
5	S. K. Sesay	District Head, Certificate in Agriculture	IPM	Responsible for district crop protection activities
6	A. G. Kamara	District Head, Diploma	IPM	Responsible for district crop protection activities
8	Modu Bangura	District Head, Diploma	Phytosanitary/IPM	Responsible for district crop protection activities
9	Henry Tucker	District Head, Certificate in Agriculture	IPM	Responsible for district crop protection activities
10	James Swarray	District Head, Certificate in Agriculture	IPM	Responsible for district crop protection activities
11	Andrew Kargbo	District Head, Certificate in Agriculture	Phytosanitary/IPM	Responsible for district crop protection activities
12	Abdul K. Fofanah	District Head, Certificate in Agriculture	Phytosanitary/IPM	Responsible for district crop protection activities
13	Amadu A. Bangura	B.Sc Rural Development	IPM	Responsible for district crop protection activities
14	Abu B. Kamara	M.Sc. Agric	Plant Pathology	Responsible for district crop protection activities

Njala Agricultural Research Center (NARC)

The Njala Agricultural Research Centre (NARC) now turned Sierra Leone Agricultural Research Institute (SLARI) is located on the campus of Njala University at Njala in Southern Sierra Leone. It has the mandate for research on major crops apart from rice. In general, research is aimed at developing improved varieties of these crops together with appropriate management practices that will ensure improved productivity and production of such crops in the country. Research efforts are also directed towards value addition and ensuring improved agricultural quality standards. The Centre has a core of scientists in the major disciplines such as breeding, agronomy, entomology, virology, nutrition, post harvest, and various aspects of crop protection.

Under the proposed project, some of these professionals at NARC will collaborate with the Crop Protection Unit of the Ministry of Agriculture to meet the requirements of basic testing, pest identification, training in laboratory residue chemical analysis for pesticides and mycotoxins. The center will also undertake a study to identify Critical Control Points along the value chain for cocoa and coffee as a basis for designing a control program. Under the project, the capacity for aflatoxin testing and “purple beans” will be enhanced.

The Center will also assist the Crops Protection Unit (CPS) in providing training to both private and public sector operatives in GAP, HACCP and other quality control measures.

Table 5: Résumé of Key Staff of SLARI Involved in the project

Name	Educational Level/Function	Field of Expertise related to the project	Project Responsibilities
Dr Dixon	PhD		Director
Dr A. Jalloh	Ph.D.	Crop Science	Coordination, training
Dr Sahr N. Fomba	Ph.D.	Plant Pathology	Quality testing, training
Mr. Festus B. Massaquoi	M.Phil	Crop Breeding	Quality testing, training
Mr. Alusine E. Samura	M.Phil	Plant Pathology	Quality testing, training
Ms Juliana Kain	Ph.D.	Nutrition	Quality testing, training
Mr. Sulaiman Sowe	B.Sc.	Post Harvest	Quality testing, training
Mr. Augustine Mansaray	M.Sc.	Entomology	Quality testing, training

The Sierra Leone Investment and Export Promotion Agency (SLIEPA)

The Sierra Leone Investment and Export Promotion Agency (SLIEPA) was established by an Act of parliament in May 2007 and became operational in May 2007

The overall vision for SLIEPA is to:

- Be the link between the Private Sector Entrepreneurs and Government Ministries, Departments and Agencies.
- Become a full fledged Investment and Export Agency that aims to raise awareness in the international community about Sierra Leone, both as a producer and an investment destination. It will focus on improving the quality of traditional exports and look into diversification opportunities.
- Contributing to Sierra Leone’s economic development through the leveraging of public and private sector resources to stimulate domestic and foreign investments and encourage the diversification of Traditional Exports and Value Addition Capacity Building.

SLIEPA Mandate from the ACT

- Encourage and promote the development of agricultural production and other activities oriented towards exports
- Facilitate the export oriented operations of small producers and manufacturers
- Serve as the focal point for raising awareness of the importance of Exports and for developing appropriate export strategies
- Provide exporters with marketing advisory services and assist them in developing marketing plans for entering or expanding their business in foreign markets
- Undertake an advocacy role for exporters in their relations with government and other bodies
- Carry out research on investments, exports and related activities
- Assist exporters in identifying opportunities for appropriate technical assistance from regional and international bodies
- Identify potential investors for agriculture and other sectors
- Promote both locally and internationally the opportunities for investment in Sierra Leone
- Collect and disseminate information about investment opportunities in priority sectors
- Facilitate public/private sector cooperation in matters relating to investments
- Support development of sector associations