Country Situation Report:

Republic of Liberia

Assessment of the biosecurity/ Sanitary and Phytosanitary (food safety, animal and plant health) situation in Liberia

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Acronyms and Abbreviations

AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AI	Avian Influenza
AU	African Union
BIVAC	Bureau Veritas (French conformity assessment and certification company)
BNF	Bureau of National Fisheries
BOT	Balance of Trade
BS	Bachelors of Science
BTSF	Better Training for Safer Food
CAC	Codex Alimentarius Commission
CARI	Central Agriculture Research Institute
CBD	Convention for Biological Diversity
DTIS	Diagnostic Trade Integration Study
DVM	Doctor of Veterinary Medicine
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDA	Forest Development Authority
FMD	Foot and Mouth Disease
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GHP	Good Hygienic Practices
GMO	Genetically Modified Organism
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis and Critical Control Points
IEC	Information, Education, and Communication
IF (-NIU)	Integrated Framework (National Implementation Unit)
ILO	International Labor Organization
IPD	Import Permit Declaration
IPPC	International Plant Protection Convention
JICA	Japanese International Cooperation Agency
LD	Liberian Dollar
LMO	Living Modified Organism
LPMC	Liberia Produce Marketing Company
MCC	Monrovia City Corporation
MDG	Millennium Development Goals
MOA	Ministry of Agriculture
MOCI	Ministry of Commerce and Industry
MOF	Ministry of Finance
MOH	Ministry of Health
MOPEA	Ministry of Planning and Economic Affairs
MOU	Memoranda of Understanding

MPH	Masters of Public Health
NBF	National Biosafety Framework
NGO	Non- Governmental Organization
NPPO	National Plant Protection Organization
OEH	Occupational and Environmental Health
OIE	World Animal Health Organization (Organization Internationale des Epizooties)
PPP	Purchasing Power Parity
PPR	Peste de Petite Ruminants
PRA	Pest Risk Assessment
PRS	Poverty Reduction Strategy
PSI	Pre-shipment inspection
PVS	Performance, Vision and Strategy
SIDA	Swedish International Development Agency
SPS	Sanitary and Phytosanitary Measures
STDF	Standards and Trade Development Facility
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TBT	WTO Agreement on Technical Barriers to Trade
TOR	Terms of Reference
TRIPS	Trade-Related Intellectual Property Rights
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
UNIDO	United Nations Industrial Development Organization
USD	United States Dollar
WAQP	West African Quality Programme (EC-funded, UNIDO-implemented)
WHO	World Health Organization
WTO	World Trade Organization

Assessment of the biosecurity/ Sanitary and Phytosanitary (food safety, animal and plant health) situation in Liberia

1. Introduction

Food safety, animal and plant health

Strengthening food safety, animal and plant health are essential to national governments as they can a) improve domestic food security through increased access to safe food, and b) enable countries to participate in an increasingly standards-driven international food and agricultural trading market, which is one of the necessary means to alleviate poverty. Strengthening plant protection and animal health are important in their own right, but also because they are essential precursors to the safety of the food that is produced and consumed in a country. Accordingly, strengthening food safety, animal and plant health addresses many of the Millennium Development Goals (MDG), as well as key points in the Liberia Poverty Reduction Strategy (PRS).

Because of the close inter-linkages between food safety, animal health and plant health, they are covered together under the World Trade Organization's Sanitary and Phytosanitary (SPS) Agreement. The SPS Agreement ensures that consumers in importing countries are supplied with food that is safe to eat and that plants and animals in the importing country are adequately protected from pests and diseases. The Agreement also ensures that importing countries are not enacting excessively strict food safety, animal and plant health regulations as an unjustified trade barrier to prevent food and agricultural imports. WTO members must be able to fulfill their obligations under the SPS Agreement in order to also benefit from the Agreement.

Therefore, the Government of Liberia recognized the need to assess and strengthen its food safety, animal and plant health (or SPS) system and requested assistance in this area through the Standards and Trade Development Facility, whose secretariat is part of the World Trade Organization. The Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), the World Health Organization (WHO), and the World Bank are also members of STDF and work to share information on SPS-related capacity building and to provide advice for the projects implemented through STDF funds.

Implementation of a "Biosecurity" approach

FAO, one of the indicated members of the STDF working group, has developed a capacity evaluation tool to assess national capacity in the integrated area of food safety, animal health and plant health, which it has termed a "Biosecurity" approach. This strategic and integrated approach allows countries to analyze and manage risks in the sectors of human health (particularly food safety and zoonoses), animal life and health (including fisheries), and plant life and health (including forestry), including associated environmental risk. The approach encompasses the policy and regulatory frameworks (including instruments and activities such as inspection, diagnostic services, certification, and others). Biosecurity covers the introduction of plant pests, animal pests and diseases, and zoonoses, the introduction and release of genetically modified organisms (GMOs) and their products, and the introduction and management of invasive alien species and genotypes.

In this document, the term "SPS system" will be used in the same manner as the "Biosecurity" approach described above, to indicate the integrated food safety, animal and plant health system.

Liberia's request for an assessment of its SPS system

Through past evaluations of its SPS system, because of its desire to eventually export food and agricultural products to lucrative markets with stringent SPS requirements, and recognition of its need to prevent imports of sub-standard food and agricultural products, the Government of Liberia requested assistance from STDF. The STDF working group approved a project preparation grant STDF/PPG/324 entitled: "Needs assessment and strategy for the development of Liberia's SPS system". This document reflects the first objective of the project, namely to assist the government in evaluating the SPS situation through application of the biosecurity capacity evaluation tool developed by FAO. The second objective of the project, which will be addressed in a separate document, is to utilize the capacity assessment to draft a project proposal to address key priority SPS needs and challenges in the country.

This assessment report has been prepared using the results of the application of the procedure outlined in part 2, the "Guide to Assess Biosecurity Capacity", of the *FAO Biosecurity Toolkit.* The toolkit sets out a systematic process to examine critically the capacity and performance of the existing national food control systems, plant and animal life and health, as well as associated risks to the environment. This process is envisaged to improve future controls, pinpoint areas for improvement and identify options to address the identified needs. The capacity needs are the gaps between the current situation and what is desired.

2. Scope, Objectives and Process of the Assessment

2.1 Scope and Objective

The scope of the current assessment is an evaluation of the Liberian biosecurity/SPS system, including policy framework, legislation, organizational arrangements, communication, inspection, verification and enforcement, quarantine and certification, diagnostic services, emergency preparedness and response, risk analysis, monitoring and surveillance. The process followed steps 3 and 7 of Guide to Assess Biosecurity Capacity, which is Part 2 of the *FAO Biosecurity Tool Kit*.

The objective of the assessment was to evaluate the current situation of Liberia's biosecurity/SPS system, and based on that assessment, to subsequently develop a project proposal to strengthen the situation. The assessment can also be used by other donors, technical agencies, and the Liberian government to plan future work to strengthen the SPS system.

2.2 Assessment Process

The international consultant undertook the assessment mission to Liberia from 5-23 July 2010, working closely with Mrs. Clara Doe Mvogo- NTC, UNIDO, Mr. Amin Modad- head of the Integrated Framework National Implementation Unit in Liberia, Mr. Steve Mambu- national consultant for the project, and other key national stakeholders. A consultative meeting was held on 9 July 2010 with the

key governmental ministries involved in food safety, animal and plant health to provide the consultant with guidance for the remainder of her assessment, as well as to discuss the key needs in the SPS system (List of participants at consultative meeting, as well as all others met during the mission is attached as Annex 1. Report of consultative meeting attached as Annex 2).

The assessment was carried out primarily through direct interviews of stakeholders and key players in biosecurity in the country. The main respondents were the government officials responsible for the development of biosecurity- related policy, standards and regulations and enforcement activities, as well as private sector and civil society stakeholders.

The objective of the assessment was explained to respondents before interviews were conducted, using a list of broad questions based on those listed in the Biosecurity Capacity Assessment tool (list of questions asked to the public sector in Annex 3). In addition, information was gained by visits to laboratories, the seaport, production and processing facilities, and other relevant biosecurity-related locations in Liberia.

3. Country Profile and factors that influence biosecurity

3.1 Main features and activities

3.1.1 Geography

Liberia is a West African country with a long (579 km) coastline of the North Atlantic Ocean on its southwestern side, bordered on the northwest by Sierra Leone, the north by Guinea (Conakry), and the east by Cote d'Ivoire. The country consists of 96,320 km^2 of land and 15,049 km^2 of sea.

(see map in Figure 1).

Figure 1. Map of Liberia within West Africa.

The terrain of the country is mostly flat to rolling coastal plains rising to rolling plateau and low mountains in northeast. The country's highest point is Mount Wuteve in the far north, rising to a height of 1,380 m. The coastline is characterized by lagoons, mangrove swamps, and river-deposited sandbars; the inland grassy plateau supports limited agriculture.

Liberia has a hot tropical climate, with heavy rainfall and frequent heavy showers from May to October with a short interlude in mid-July to August, with an average annual rainfall of 170 inches (4,320 mm). During the drier winter months of November to March, hot and dry dust-laden harmattan winds blow from the Sahara, but the nights can be cool.

3.1.2 Liberia's history and people

Liberia's history is unique among other African countries, as it is one of the few countries in Africa, and the only country in West Africa that was not colonized by European countries. In 1822, freed slaves from the US began to be sent to the area of Africa which is today Liberia. By 1847, these freed slaves and their descendants (called Americo-Liberians) established the Republic of Liberia, with a government modeled on that of the United States. For many years, the minority Americo-Liberians held most of the political and economic power in the country. However, President William Tubman (president from 1944-71) worked to strengthen relations between the Americo-Liberians – living mainly in coastal areas and around the capitol of Monrovia, and the indigenous inhabitants living throughout the country.

In 1980, Samuel Doe led a military coup to overthrow then-President William Tolbert, which marked the beginning of a period of instability that eventually led to two periods of civil war, devastating the economy, infrastructure, as well as thousands of human lives. In August 2003, a peace agreement was signed to end the war and prompted the resignation of former president Charles Taylor. After two years of rule by a transitional government, democratic elections in late 2005 brought current President Ellen Johnson Sirleaf to power.

Liberia is estimated to have a population of 3.7 million (July 2010 estimate), growing at 2.8% with a population density of 35.5 people/ km^2. Liberia has a youthful population with 44% under the age of 14 years and a median age of 18.4 years. The prolonged civil conflict forced many people to leave the country, with some returning. People were also often displaced within the country, with many rural residents leaving their land.

In 2009, Liberia was positioned at 169 out of 182 countries worldwide in the United Nations Development Program (UNDP)'s Human Development Index. Liberia is one of the poorest countries in the world, with an annual per capita Gross Domestic Product (GDP) of $500 (on a Purchasing Power Parity-PPP basis), ranking 225 of 227 countries in the world. Life expectancy (2010 estimate) at birth is 56.6 overall with 55 for males and 58 for females.

Most (95%) of the population is indigenous Africa, with 2.5% of the population composed of Americo-Liberians, and another 2.5% of the population being descendants of immigrants from the Caribbean who had been slaves (Congo people). Nearly half (40%) of the population are Christians with an estimated 40% holding indigenous beliefs, with 20% Muslims.

3.1.3 Natural Resources

Liberia is richly endowed with a number of valuable natural resources, namely iron ore, diamonds, gold, hydropower, and the most plentiful forests in West Africa- providing timber and rubber. Liberia also has a long coastline on an ocean teeming with fish, plentiful rainfall, and ample fertile land for its small population. Its agro-climatic conditions to raise crops such as oil palm and cocoa are among the best in West Africa.

However, Liberia also faces a number of environmental challenges, including tropical rain forest deforestation, soil erosion, loss of biodiversity, and pollution of coastal waters from oil residue and raw sewage.

3.1.4 Economy

Liberia is currently (2009 data) one of the poorest countries in the world, with an annual per capita Gross Domestic Product (GDP) of $500 (on a PPP basis), ranking 225 of 227 countries in the world. However, in 1980, GDP per capita (in 2005 prices) was estimated at US$ 1,269, which declined to US$163 in 2005. This 90% decline is possibly one of the most extreme economic collapses ever experienced in the world. However, the economy was expanding in 2006 and 2007, but was hindered in 2008 by the global financial crisis and delays in the resumption of full-scale mining and forestry operations. Liberia was also saddled with a huge debt burden, estimated at about US$4.4 billion as of June 2007; however, in September 2010, $1.2 billion of the debt was forgiven.

Because of its close ties with the US, Liberia used the US dollar as its currency from 1943 until 1982. The country currently uses a dual currency system where people can choose to use US dollars or Liberian dollars (exchange rate of 70 LD: 1 USD in July 2010) in their monetary transactions.

In 2002, it was estimated that over ¾ (77%) of the country's GDP came from agriculture, with 5% from industry and 18% from the services sector. A corresponding 70% of the workforce was engaged in agriculture, with 8% in industry, and 22% in the services sector (2000 estimate). The unemployment rate, estimated at 85% in 2003, was one of the worst in the world, ranked 198 of 200 countries.

The main agricultural products of Liberia include rubber, timber, coffee, cocoa, rice, cassava, palm oil, sugar cane, banana, and game meat. The main industries currently operating in the country are rubber processing, palm oil processing, and logging.

Liberia has the potential to produce most of the staple food crops it needs, and even to export foodstuffs, but the lingering effects of the civil conflict have caused many in the country to suffer from food insecurity. A joint government/UN assessment at the end of 2009 indicated that 11.3% of the population remained food insecure, with 38% of the population was highly vulnerable to food insecurity. Rice is the main staple food consumed in the country, but low domestic production levels cause an estimated two-thirds of rice consumed in the country to be imported.

3.1.5 Trade

(Note that data in this section is from the Liberia Institute of Statistics and Geo-Information Services Statistical Bulletin, Volume 2, January 2010)

In 2008, Liberia exported as estimated US$239 million (Balance of Trade- BOT value) in goods, with export values rising steadily each year from US$104 million in 2004. Rubber comprised 86% of the exports, with US$ 206 million of exports in 2008. This was followed by cocoa beans and coffee with US$2.8 million in 2008. Another of Liberia's primary exports currently is scrap metal.

The main destinations (in 2008) for the country's exports are to Belgium (69% of exports), United States (18%), United Arab Emirates (5%), and South Africa (2%).

In 2008, Liberia imported an estimated US$798 million (BOT value) in goods, which has also been steadily increasing since 2004 (estimated to be US$337 million). The main commodities imported include food and live animals, machinery and transport equipment, petroleum products, and manufactured products. The main countries (in 2008) that Liberia imports from include the USA (42% of exports), China (12%), Nigeria (8%), and Belgium (4%).

3.1.6 Statistics on Agriculture in Liberia

(Note that data in this section is from FAOSTAT (faostat.fao.org)

Table 1. Agricultural production (2007)

Rank	Commodity	Value of production ($1000)	Production (Metric Tonnes)
1	Natural rubber	56 588	105 500 *
2	Rice, paddy	47 352	231 800 *
3	Cassava	39 633	550 000 F
4	Bananas	17 101	120 000 F
5	Vegetables, fresh nes	12 666	67 500 F
6	Game meat	10 807	6 600 F
7	Palm oil	10 536	44 000 F
8	Plantains	9 537	43 000 F
9	Sugar cane	5 338	265 000 F
10	Maize, green	3 837	19 500 F

Table 2. Agricultural imports (2007)

Rank	Commodity	Value of imports ($1000)	Quantity imported (Metric Tonnes)
1	Rice, milled	38 275 R	145 660 R
2	Palm oil	14 514 R	16 581 R
3	Food Prepared, nes	10 674 R	2 672 R
4	Breakfast cereals	9 440 R	26 851 R
5	Sugar Refined	9 000 F	14 824 *

Table 3. Agricultural exports (2007)

Rank	Commodity	Value of exports ($1000)		Quantity exported (Metric Tonnes)	
1	Rubber, natural dry	90 302	F	56 245	*
2	Cocoa beans	2 050	F	1 410	*
3	Tea	1 534	R	2 411	R
4	Palm oil	272	R	638	R
5	Tobacco, unmanufactured	141	F	22	F

Legend for all tables:
* = unofficial figure
F = FAO estimate
R = estimated data using trading partners database
nes = not elsewhere specified

3.2 Trends in production, processing and distribution that influence biosecurity

Agricultural production in Liberia is in a rehabilitation phase after the prolonged civil war reduced agricultural production to extremely low levels. In partnership with various UN agencies, NGOs, and bilateral donors, the government is currently encouraging farmers to increase their levels of production.

Some large agricultural producers are working in Liberia, but the government is also wisely encouraging small scale farming to increase national food security. These small scale farmers often have limited education and information on controlling pests and disease, so extensive sensitization efforts are needed. However, the government extension services and livestock assistants system is very weak, so these small scale farmers may need increased support to ensure food safety, animal and plant health.

A number of efforts are currently underway to increase rice production in an effort to reduce the country's dependence on imported rice. However, increasing production is hampered by a number of pests which can reduce production, but also cause high levels of post-harvest losses.

A number of donor programmes are also promoting the production of tree crops, namely cocoa, coffee, and oil palm, as cash crops. However, to receive the best price for their produce, farmers must be able to ensure that the products meet high quality standards, including for mycotoxin levels in coffee and cocoa. Farmers must also ensure that the trees are free of diseases and other pests in order to maintain high levels of production.

Due to its favourable agro-climatic conditions, Liberia has the potential to produce enough fresh fruits, vegetables, and flowers to export, as a number of other African countries are already doing successfully. However, the country is currently importing these items, which are often of inferior quality. Therefore, Liberian producers could begin to supply the local market with high quality produce and eventually export if they can increase their production and strengthen their product quality standards.

In-land fisheries (aquaculture) is also being heavily promoted, which is useful to increase the availability of protein for consumption and to take advantage of the abundance of water in the country. However, this concentrated fish production will also increase fish health concerns, thus requiring good fish raising practices. The government is also strengthening its efforts to have a greater number of fish caught in the Liberian seas brought to Liberia for consumption and export. With this increasing number of fish harvested in the country, the conditions under which the fish are harvested, stored and transported must be improved. For example, sanitary ice must be made available to fishermen, boat landing sites must be improved, and storage, handling and transport conditions must be more hygienic.

Efforts are also underway to re-stock small ruminants, hogs and poultry, as well as beef cattle, after the war. However, a strong animal health system, including the availability of veterinary supplies and of personnel trained in animal health, must be in place for such efforts to be successful. Also, controlling the spread of animal diseases, particularly in poultry, is difficult because most live animals are sold through informal, often mobile markets (for poultry, often on bicycle). In addition, reliable supplies of quality feed, chicks/breeding stock, and other such inputs are also needed. Such agricultural inputs, as well as inputs such as pesticides, that do enter the country are not well-regulated or inspected and thus may be of inferior quality.

Because of the current low levels of production, Liberia imports large quantities of food products, including many highly perishable items such as fresh eggs and poultry products. Due to the current weak inspection system for imported food, the products are likely of inferior quality and safety upon arrival in the country, which is further exacerbated by unhygienic storage and transport conditions often occurring in the country. Storage of perishable items is particularly hampered by the extremely limited availability of electricity in the country, thus causing limited refrigeration and frozen storage capacity. Further, the imported food items (such as fruits and vegetables) may bring disease and pests with them that could affect the same plants growing in the country.

Another important trend in this area is the increasing consumption and trade of bush meat (from non-domesticated animals). These animals may be poisoned or may be trapped and left in the trap for an extended time period, which can cause the meat to be unfit for human consumption. The meat is also often not stored, transported, or handled in a hygienic manner, and is almost never inspected since its sale is considered illegal in Liberia. Therefore, there are a number of concerns regarding the safety of this meat.

Very limited processing of food is currently occurring in the country, and what is done is on a small scale basis and generally by foreign companies. This is partially due to the lack of affordable electricity, as most homes and businesses in Liberia depend on gasoline- powered generators, which is very expensive. Accordingly, Liberia is in the process of developing an agro-industrial strategy, which calls for increased food processing to occur in the country. It is very important that Liberia does increase the value-added processing of agricultural products from the country, but it is also important that the processing is done in a safe and hygienic manner.

This lack of adequate food processing facilities also causes large quantities of processed food to be imported into the country to meet the growing demand for more convenient food products, particularly from the large number of people working with the UN, NGOs, embassies, and Liberians returning from abroad.

There is an increasing number of hotels, restaurants and supermarkets which cater to this group of people. In order for Liberia to develop a tourist market– which is possible with its long stretches of

beautiful beaches – such establishments must continue to be developed, and must be able to ensure the safety of the food they serve. Local producers and processors could provide fresh foods to these establishments at prices cheaper than for imported products, but they must be able to meet the requisite food safety standards.

The majority of Liberians, particularly in areas outside of the capital city, purchase their food from small neighbourhood shops, in local (often informal) markets, and from street food vendors, all of which need greater levels of inspection and control.

Many food products and agricultural inputs enter the country through the porous land borders from Cote d'Ivoire, Guinea, and Sierra Leone, occasionally through informal border crossings to avoid the customs duties and inspection required at major land border posts. Due to the great distance from the capital city and limited capacity of the government ministries, government inspection and control of products in these rural areas is often limited.

3.3 Pathways for introduction of biosecurity hazards

The major pathways for introduction of identified biosecurity hazards into Liberia include the following:-

(i). Lack of adequate systems for disease control in the country, particularly animal diseases, due to extremely limited human and physical capacity to conduct disease surveillance and implement control measures. Thus, any isolated cases of disease can easily become a large problem.
(ii). Imported food products which are not properly inspected due to the weak inspection system.
(iii). Poor storage and transport conditions for food and agricultural products, causing deterioration of product safety.
(iv). Informal trade across the long, porous land borders with the neighboring countries; those countries are also dealing with various political challenges and thus may not always have adequate control over animal and plant diseases and food quality and safety. Any issues occurring there will easily cross into Liberia.
(v). Food production, processing, preservation and storage carried out under sub-standard hygienic conditions
(vi). Regional trade- a pathway for avian influenza and other diseases.

Table 4 below gives a summary of the biosecurity hazards across the sectors, which were identified through discussions with stakeholders.

Table 4: Biosecurity hazard/threats identified

Threat/ Hazard	Effects/impacts	Responsible Agencies
Food and water-borne illnesses	Human health; illness and death	MOH, MOA, MOCI, MCC
Avian Influenza, Swine Influenza	Animal and human health	MOA, MOH
Peste de Petite Ruminants (PPR)	Animal health	MOA
Newcastle Disease	Animal health, economic losses in poultry	MOA
Aflatoxins	Human health, post harvest losses, reduced value of exports	MOH, MOA, LPMC, MOCI

Fish diseases/ poor hygiene	Fish health/ production, rejection of exported products	BNF
Plant pests, including post harvest pests	Plant health and economic losses	MOA, FDA
LMOs and GMOs	Environment and Biodiversity	EPA
Indiscriminate use of pesticides/ pesticide residues in foods	Human health, environment, plant health, animal health	MOA, EPA, MOH
Rabies	Human health and animal health	MOA, MOH
Unregulated bush meat consumption	Human health	FDA, MOH
Caterpillar species in Dahoma trees, water sources	Human health, plant health (Jan 2009 outbreak thought to be army worms, but later proved otherwise)	MOH, MOA, FDA

Note: This list is not necessarily comprehensive of all Biosecurity hazards in the country, but attempts to address some of the key hazards (not listed in any particular order).

3.4 Cultural perceptions and practices

Rice is now the staple of the Liberian diet. Therefore, pests and diseases that affect rice, either in production or storage, are critical. Due to the historic lack of refrigeration in Liberian homes, prepared food is often left at room temperature for extended periods of time. There is a strong tradition of bush meat consumption, leading to an increase in its capture and consumption. The animals may be poisoned, trapped or shot, and are often slaughtered under unhygienic conditions in the forest.

Many Liberians hold a number of traditional beliefs that affect their food production and consumption habits. For example, some people believe that females consuming eggs produced by their own chickens will cause infertility; thus, domestic production of eggs remains limited, thus encouraging importation of fresh eggs.

Due to the prolonged period of conflict resulting in disruption of formal education at all levels, many Liberians have limited education and training. Many Liberians working in professional positions migrated from the country, although some are returning now that the country has been at peace for 7 years and the economy is expanding. Many people have been displaced within the country as well, and many may not want to return to agricultural production due to the perceived increased opportunities in urban areas.

4. Liberia's Biosecurity capacity and performance assessment

In accordance with the procedure outlined in the *FAO Biosecurity Toolkit*, step 4: "Assess existing biosecurity capacity and performance", this assessment of Liberia's biosecurity status addresses the policy framework, legal and regulatory framework, organizational arrangements, and communication, followed by an examination of the sectors of biosecurity/risk analysis functions at an organizational level.

4.1 Policy Framework

In 2006-2007, Liberia developed and implemented a Poverty Reduction Strategy which included a Liberia Agriculture Sector Investment Program. These and other such overarching plans for strengthening the agriculture sector and improving opportunities for trade provide the platform for further, more specific biosecurity-related policies.

Fragmented policies related to Biosecurity/SPS exist across various sectors, but many of those policies are outdated. No integrated policy on Biosecurity/SPS exists at the time of this assessment. The existing policies that are in place related to biosecurity include the following:

- DRAFT Occupational and Environmental Health Policy- MOHSW (includes some food safety)
- Note that the National Health Policy (2006) has little reference to food safety.
- DRAFT Fisheries Policy (MOA)
- DRAFT Food Inspection Policy (MOA)
- Agricultural Policy (MOA)
- Forestry Policy (2006; FDA)
- DRAFT Biosafety Policy (EPA)
- Environmental Protection Policy (EPA)
- DRAFT Wetlands Policy

4.2 Legal and Regulatory Framework

There is currently no integrated legal framework on biosecurity/SPS and sectoral legislations are often outdated or inadequate. There is very limited domestication of international standards and requirements into national laws, although some efforts are being made to adopt national standards from other countries, particularly Nigeria and likely Brazil. The following are the main sectoral legislations in place that relate to biosecurity. The agencies responsible for their coordination and/or implementation are also indicated by listing its abbreviation after the name of the act:

- National Public Health Law- includes some information on food safety (1976; MOH)
- Environmental Protection Act (EPA)
    - Working on approval process for regulations, guidelines, and standards
        - Start with guidelines and then develop them to regulations
- Natural Resources Law (1956; BNF)
- DRAFT Fisheries legislation and regulations (BNF)
- Agriculture Act (1950; revised in 1971; MOA)
- DRAFT Agriculture Act (MOA)
- Forestry Law (2006; FDA)
- DRAFT Wildlife Law (FDA)
- DRAFT Biosafety Act (EPA), also includes implementing guidelines, regulations
- Commerce and Industry Act (1962; MOCI)
- Ministry of Finance Revenue Code (2002; MOF) www.mof.gov.lr
- Monrovia City Corporation Ordinance on Public Health and Sanitation (1988, MCC)

The international consultant obtained copies of some of these legislations during her mission to Liberia, with one available online, as indicated.

4.3 Institutional Framework

Various ministries, departments, and other bodies in Liberia all have diverse roles and responsibilities related to different issues of biosecurity. The Ministry of Agriculture is responsible for most aspects of animal and plant health, with the Ministry of Commerce also responsible for some aspects. However, a number of Ministries (primarily MOH, MOA, MOCI, and also Monrovia City Corporation (MCC) in Monrovia) have responsibilities and activities in the area of food safety, with often overlapping functions. There have been efforts at the Ministerial and policy-making levels to coordinate work in food safety – particularly in food inspection – and have assigned specific responsibilities for food control to each ministry. However, when speaking with the actual inspectors in each of the ministries, it is apparent that adherence to the upper level decisions has been difficult to achieve at the technical and working levels.

Liberia is a member of the Codex Alimentarius Commission and does have a National Codex Committee established, although it is not currently active. The National Steering Committee of the United Nations Industrial Development Organization (UNIDO)-implemented and EU-funded West African Quality Program (WAQP) is currently the most active body in biosecurity-related areas, with a broad representation from government, private sector, and consumer groups. Overall, continued efforts are needed to strengthen coordination at all levels (Ministerial, policy-making, technical and operational).

Most of the biosecurity-related agencies in Liberia are represented at the seaport and work in the capital city, and indicated their activity at some of the land border posts. However, most agencies seem to have a limited presence in the rural areas.

In addition to the legislative responsibilities of various agencies implied in the listing of biosecurity-related legislation above, many stakeholders have other various roles and activities related to biosecurity, as summarized below.

4.3.1. Ministry of Commerce and Industry (MOCI)

General items:

- Importers must come to MOCI to get an Import Permit Declaration (IPD) for most products
    - World Bank recommended that changes be made to IPD as it is restrictive to trade.
    - MOCI is making a list of items that require an IPD, rather than requiring for all items
- Have an Integrated Framework National Implementation Unit (IF-NIU), which is leading national efforts to become a WTO member.
    - Working to strengthen trade capacity for development.
- MOCI currently does not have anyone directly responsible for TBT matters, while the IF-NIU does provide some leadership in this area.
- Have a unit working on Intellectual Property Rights (TRIPS) issues
    - Two commissions recently established by President on Industrial Property Rights and the other for Intellectual Property Rights
- Have a Consumer Protection Unit, but not very active
    - They do investigate some complaints
- Host of West African Quality Program (WAQP), implemented by UNIDO and funded by EU
    - Program is working in many areas to improve quality of products consumed and produced in Liberia (more information on activities in other parts of report)

Bureau of Commerce and Trade

- *Inspectorate*: present at ~7 land borders; 6 inspectors at port

- Checks paperwork of imported goods at exit gate of port; do not actually inspect imported goods at port, as Bureau Veritas (BIVAC) conducts this inspection
- Inspect warehouses in port area and supermarkets to check the quality, safety, price of imported foods

Bureau of Industry

- *Standards Division:* 25 standards officers working
  - Role is to ensure that products on Liberian market meet standards
  - Also work in calibration and metrology- calibrating (fuel) pumps, scales
    - Planning to work on calibration of pressure and other measures later
  - Planning to set up a technical committee to adopt more product standards from Nigeria (and Brazil)
  - Standards officers were ~conducting inspections of various products, now re-training officers to respond to complaints about standardization of products
  - Standards division feels that Inspectorate should be working mainly in enforcement, checking prices, and registration of businesses
  - Recently sent guidelines for Good Manufacturing Practices (GMPs) to all manufacturers, including food processors
  - Also check alcohol content of liquor and spirits on market
- Assistant Minister for Industry serves as Codex Contact Point
  - National Codex Committee has not been active in recent years
  - This Committee was re-activated (after war) in 2007

(Reporting directly to Deputy Minister for Commerce and Industry)

- Standards Lab is under development, through WAQP and UNIDO
  - Will conduct food micro and food chemistry testing first, eventually will have metrology lab
    - Food micro: will conduct colony counts, enumeration of coliforms, testing for E.coli and Salmonella, using ISO methods.
    - Food chemistry: proximate composition, analysis of food colours, food preservatives, and food contaminants.
    - Will be able to test water, food, milk, animal feed.
  - Some staff are already in place, but need to hire a lab manager, quality manager, lab technicians; but difficult to find qualified people
  - Continued capacity building is needed.

4.3.2 Ministry of Agriculture

a. Technical Services Department

- Animal Resources
  - very limited human capacity- no DVMs currently working in this unit
  - includes coordinator of veterinary services; but Liberia is NOT yet a member of OIE
  - includes Central Veterinary Laboratory (at Fendell)
    - conduct the following tests in animal health: virology, serology, microbiology, hematology, haemagglutination, haemagglutination inhibition, parasitology, postmortem analysis

- lab has recently been renovated through FAO project
- FAO project conducting extensive training of lab technicians, but capacity still low
- project is training livestock officers on disease surveillance and how to take samples
- laboratory could be much better utilized, with more staff to conduct training and also to conduct analyses

- includes field livestock officers, veterinary assistants
- planning to have 60 community livestock workers, currently paid by donors
- recently established veterinary clinic in Monrovia
- responsible to issue permits for live animal imports
    - have officers at some land borders to check permits and imported animal health
    - (note that MOH is currently responsible to issue permits for animal products such as meat and milk)
- have implemented a number of projects from FAO and other donors to strengthen emergency control of animal disease
- have officers to carry out inspection of meat at Monrovia slaughter house

-Quarantine Services

- Mandated to cover quarantine issues for both plants and animals
- Serves as International Plant Protection Convention (IPPC) Focal point (Liberia is a member of IPPC)
- Serves as Better Training for Safer Food (BTSF- funded by EU) focal point
- Have officers at seaport, airport, some land border posts, post office
    - Part of ship boarding party to check incoming ships
- Currently have 27 quarantine officers- mostly working in plant health issues
    - Planning to conduct more plant pest and disease surveillance and identification at county level
    - They should work with extension officers, but basically no extension officers in place
- Responsible to check imported products for phytosanitary certificates; issue phytosanitary certificates for exports (including for timber and forestry products), using IPPC forms
- Planning to build a lab for plant pest and disease diagnostics- through AfDB funds
- People wanting to import pesticides must get permission from MoA
    - Planning to conduct pesticide formulation and quality analysis in the future
- Planning to do pest risk analysis (PRAs) in the future
- Do NOT currently have any animal or plant quarantine facilities

b. Research and Extension

- responsible to disseminate information to farmers
- extension is currently operating without a policy
- capacity is currently very weak; basically no government extension workers posted upcountry

c. Bureau of National Fisheries (BNF)

- was previously part of Technical Services department, now reports directly to Minister
- have 28 permanent staff, mostly in Monrovia
    - staff are present at current landing sites and seaport to inspect incoming fish
    - 3 inspectors reported to work upcountry to provide advice to aquaculture producers
- a US$14 mil, 5-year World Bank project to assist the fisheries sector recently started
    - Also have projects in other Mano River countries (Liberia, Guinea, Ivory Coast, Sierra Leone)

- project will establish a competent authority for certifying fish exports to the EU
    - will train inspectors to conduct export inspection
- will assist in strengthening a laboratory for post-harvest safety of fisheries products
    - they are planning to collaborate with other agencies on the lab
- project will strengthen surveillance to reduce illegal fishing
    - will work with police and coast guard to conduct inter-agency enforcement
- planning to develop landing sites, chilled storage, ice production facilities, etc
- will conduct training of fishermen, processors, in food safety
- planning to also develop standards for import of fish through project

d. Central Agriculture Research Institute (CARI)
- located 3 hours outside of capitol city
- reports directly to Minister of Agriculture
- main focus is to produce new varieties of plants, particularly cocoa, rice, cassava, coffee, oil palm
- carry out some livestock (and some fish) breeding to produce new breeding stock for farmers

Note that the Ministry of Agriculture now has a monthly meeting of all NGOs and other donor organizations working in agriculture, to better coordinate activities.

4.3.3. Ministry of Health and Social Welfare

a. Division of Occupational and Environmental Health (OEH)

- Have 175 staff in country; 27 staff at headquarters, ~ 10 OEH staff/ county (currently funded by Oxfam is providing them with a small stipend, government is trying to get funding to hire them)
- Serve as co-chair of Codex committee
- Note that the unit does NOT have a functioning vehicle for sample collection/ inspections
- MOH asserted that they are the competent authority for post-harvest safety of fish products; said that BNF was competent authority for pre-harvest fish health
- Note that MOH is currently building a National Public Health Lab, but food safety is not planned to be included

- 1) Water unit:
    - Have water quality lab; conducts bacterial and chemical testing of water
        - Can test cholera, E.coli, coliforms
        - No Liberian water quality standards, so use WHO standards
    - Counties also have some capacity to do basic testing

- 2) Food unit:
    - Monitor restaurants (should be once/month), street food vendors, supermarkets, open markets, etc to prevent food contamination
        - Conduct physical inspections ~ 4 times/year in Monrovia in stores
    - Considers themselves responsible for inspection of processed food, meat after slaughter
    - Inspects food in warehouses: checks temperature, presence of pests and rodents, fumigate if needed; trying to do more education than enforcement now
    - Issue food handler certificates (fecal samples must be tested 2x/ year)
    - Conduct training of street food vendors, restaurants, industries on safe handling of food
        - Amount of training depends on funding available

- Reported that there is an OEH staff that is responsible for slaughterhouse
- NO lab for testing of food
- NO food borne disease surveillance carried out; epidemiology division in Ministry of Health carries out limited surveillance of cholera and related outbreaks

- 3) Sanitation unit:
  - Implementing community-led total sanitation scheme to reduce open defecation and improve human waste disposal
  - These activities include some aspects of food hygiene in the general improvement of hygiene

- 4) Small occupational health unit
- 5) Small unit in chemical safety
- 6) Port health unit
  - Officers stationed at 6 of 22 entry points in Liberia
  - Administer vaccines, ensure that imported food is fit for consumption; part of ship boarding party
  - Monitor sanitation of port area

b. County health teams

- should have an occupational and environmental health (OEH) coordinator and a field technician in every county. Would like to have 2 OEH workers in every district (~5 districts/ county)

c. Tubman National Institute of Medical Arts

- training arm of MOH
  - includes School of Nursing, Midwifery, Physicians Assistants, Environmental Health
- School of Environmental Health offers a 2 year diploma course
  - have 40 students total (20 in 1st year and 20 in 2nd year), 5 full time lecturers
    - instructors have BS in sociology or demography from University of Liberia
  - planning to extend to a 3 year program
  - no BS in public health available in country; Cuttington Univ. (private) offers MPH
  - government pays students' tuition; students must do 2 years national service after grad.
    - government does NOT guarantee a job for graduates
  - currently doing some research with Johns Hopkins University in USA

4.3.4. Ministry of Finance (MoF)

- Customs (part of Department of Revenue)
  - Work at 17 main ports (4 seaports, 1 parcel post, 2 airports, 10 land border posts)
    - Have 17 additional sub-ports
  - Have 302 customs officers- at headquarters and in field operations
  - Liberia is a member of World Customs Organization, Harmonized System
  - Responsible to collect customs of imported goods
    - Work with BIVAC (Bureau Veritas) to conduct this function
    - BIVAC is contracted to conduct Pre-Shipment Inspection (PSI) and also does Destination Inspection, particularly because PSI is not conducted in every country as BIVAC does not have offices everywhere and some exporters ship before PSI.
      - BIVAC mainly checks the number and price of imported products

        - BIVAC does not check for standards under which goods are produced
        - BIVAC feels that they should do inspection and the government should carry out enforcement
    - Customs officials stated that they are required to implement the safety and quality standards that have been established; but few standards have been adopted yet.
    - Moving towards using ASYCUDA computerized import records

4.3.5. Ministry of Planning and Economic Affairs (MoPEA)

Bureau of Economic Cooperation and Integration

- Includes international economic relations unit, NGO and regional integration
- Work closely with external development partners (particularly UNDP)
- Work with MOCI on standards for import and export, with Customs on Economic Community of West African States (ECOWAS) common tariff
- Register NGOs working in country- 650 national and international NGOs

4.3.6. Forestry Development Authority (FDA)

- Autonomous body with a Ministerial Board of Directors- Minister of Ag is chair of Board
    - Also have a Forest Management Advisory Committee, made of forestry stakeholders
    - Have 379 employees, mostly stationed in the field, conducting forestry surveillance and wildlife management
- Work with MOA, who issues phytosanitary certificate for export of forest products
    - FDA then issues an export permit
- In past, had Forestry officers at port to ensure that exported forestry products were fumigated
- Every logging company has an FDA officer with them to ensure safety of chemicals used, etc…
    - Currently have 7 forest management contracts and 3 timber sales contracts in country
- Counter-check work of SGS to monitor chain of ownership of forest products sold (chain of custody from stump to point of export)
- Liberia is signatory to CITES, ECOWAS regional agreements in forestry
    - Signing Voluntary Partnership Agreement with the EU now
- Had a forest products lab before the war, trying to re-establish
    - Utilize soil lab at CARI as needed

4.3.7. Environmental Protection Agency (EPA)

- Autonomous agency, started in 2004, functional in 2006
    - Responsible to a policy council (head is Minister of Lands and Mines) and a Board of Directors (head is Minister of Planning)
    - Also works closely with FDA, MOA
- Has 10-15 decentralized offices
- Have inspectors checking to see how industry adhering to their environmental monitoring plans
    - Do NOT go to food processing plants
- Conduct Environmental Impact Assessment (EIAs) once environmental management plans are in place
- Have a laboratory- with a manager and 2 assistants
    - Has equipment for conducting water quality and air quality testing (provided by United Nations Environmental Program- UNEP)

        - However, do NOT have needed reagents now, so not testing now
        - Did test waste water of Firestone and Coca-Cola in past
        - No one in EPA knows how to use air quality testing equipment
        - However, only have electricity (from generator) during office hours, so can NOT conduct micro testing requiring overnight incubation.
    - Lab supervisor has training, but assistants have not had lab training
    - No capacity for testing pesticide formulation or pesticide residues

- National Biosafety Focal Point is in EPA
    - Liberia has been party to Cartagena Protocol on Biosafety since 2002
    - Liberia completed the National Biosafety Framework (NBF) in 2005, including the following:
        - Regulatory framework and policy, implementing guidelines, monitoring, awareness, administration system
        - Had NBF coordinating committee in 2005, now called National Biosafety Committee; currently meet as necessary
            - Includes MOA, MOH, MOCI, FDA, Customs, Ministry of Justice, etc
    - Have recently submitted project proposal ($700,000; 4 years) to United Nations Environmental Program (UNEP) Global Environmental Facility (GEF) for an NBF implementation project to revise regulatory framework, monitoring, etc
        - Want to strengthen/develop a lab to conduct monitoring of products coming into the country for GMOs/LMOs through project
            - Could strengthen existing labs at University and at CARI and build a lab at EPA
        - Project would include awareness raising among general public about LMOs/GMOs
        - Would strengthen capacity to conduct biosafety risk assessments
    - Do NOT know level of GM foods coming into Liberia as there is no testing capacity
        - Relief products from US and other countries during war were likely GM
        - NO known planting of LMOs, but expect that an application for planting GM rice is possible
            - Want regulations and capacity to handle GM products to be in place before any GM introductions are made

4.3.8. Liberia Produce Marketing Company (LPMC)

- State-owned enterprise; have a Board of Directors which reports to the President
- Have 50 employees- some are working in farming to raise money for LPMC
- In past, bought and processed ~ all coffee and cocoa produced in the country
- Now they work to regulate the market for coffee and cocoa; dry cocoa for farmers without dryers
    - Exporters must register with LPMC (7 cocoa exporters, 3 active cocoa exporters)
    - LPMC establishes minimum prices for purchasing coffee and cocoa
    - Receive rice donations on behalf of government
    - Dry cocoa for farmers- charge a processing fee; large producers have their own dryers
    - Also look at quality of exported products- Liberia is not able to meet Grade A quality std.
- World Bank, and LPMC Board recommended that LPMC become a commodity *board*

- Farmers in Ivory Coast may sell their cocoa in Liberia as it may be easier for them to get it to market in Liberia than to transport it to market in Ivory Coast. Liberia needs to ensure the quality and safety of all cocoa that is sold from Liberia to ensure that it maintains a reputation for quality cocoa. .

4.3.9. Ministry of Education

a. University of Liberia

- All BS- level programs are moving to new University campus at Fendell
    - Note that the previously mentioned Central Veterinary Lab is located on the Fendell campus of the University
- School of Agriculture: includes the following programmes (BS level)
    - General Agriculture (43 grads in 2009), Agronomy (5 grads), Home Science and Community Development (no grads in 2009), General Forestry (28 grads), Wood Science and Technology (no grads), Ag Extension (no grads)
    - No functioning laboratories in School- all were destroyed in war
    - No graduate programmes in Agriculture
- General Agriculture Program- approximately 900 students in this 4 year program
    - Includes basic courses in animal science- have one Doctor of Veterinary Medicine (DVM) teaching some courses (only DVM in public sector in Liberia)
- Agronomy- teach some pest management
- Home Science and Community Development Program- only 4 students in program now
    - Includes training for home level food processing and preservation
    - Most graduates leave to work abroad; some work for MOA in Liberia
    - Many incoming students are afraid of courses with word “Science” in it as science teaching is weak in most secondary schools
- General forestry
    - Do have some forestry sites where students can get practical training in forestry
- Challenging for graduates to find jobs

b. Cuttington College, private school
- offers an MPH
- did not visit school due to distance of school away from Monrovia

4.3.10. Ministry of Justice

- Other ministries work with Police Force for enforcement of any laws and regulations
- Ministry is ultimately responsible for updating legislation

4.3.11. Monrovia City Corporation (MCC)

Waste Management and Sanitation Department- Environmental Health Division

- Have 27 Environmental health officers
    - Officers received training in food hygiene from MOH in 1988
- Visit food warehouses, supermarkets, cold storage, restaurants, local markets to identify environmental problems (in Monrovia area only)

- Have 2 teams of 3-4 people each working in food inspection, with limited formal training and no testing facilities
- Inspect expiration dates, work with sanitation group to dispose outdated food

4.3.12 United Nations agencies related to Biosecurity

- UNDP
  - Provides project funding for various programs
  - Currently no projects in food safety, plant protection or animal health

- WHO
  - Provides technical and financial support to the MoH in food safety
  - Assisted in the development of draft OEH policy, food safety situation analysis (Mar 09)
  - Trying to help MOH to make food safety a larger priority and strengthen food safety

- FAO
  - Implemented numerous emergency assistance projects in various aspects of agriculture
  - Numerous Avian Influenza (AI) and animal health-related projects
    - Assisted in rehabilitation of vet lab at Fendell, Vet clinic in Monrovia
    - Assisting animal disease surveillance at local level, training of meat inspectors
  - Various plant protection projects, particularly control of pests
  - Numerous food security projects, forestry, fisheries, etc
    - Working on livestock restocking projects

- UNIDO
  - Implementing the West African Quality Programme (see notes from MOCI)
  - Providing additional funding for the technical modifications to the building to house the National Standards Laboratory

4.3.13. Donor Countries/ Agencies

- USAID
  - assisting in developing tree crops, such as cocoa, including increasing quality to increase price
  - working on improving local mechanical extraction of oil from oil palm
  - not working directly in animal health now, but assisting with re-stocking
  - working with MOCI on strengthening enabling environment for trade, conducted assessment of MOCI in 2009
  - conducted SPS-related capacity evaluation of country in May 2007
  - Spoke with Forestry person as Agriculture person was out of the country during mission

- European Union (EU)
  - funding numerous projects in food security, implemented by various UN orgs and NGOs
    - now conducting many projects in rice production, in-land fisheries, vegetable prod.
    - funded various livestock re-stocking projects in the past, but animals did not do well, likely due to lack of technical expertise (animal health) in country to care for them
  - implementing “Better Training for Safer Food” project, providing inspection training

- funding the West African Quality Programme (implemented by UNIDO)

- Swedish International Development Agency (SIDA)
  - Swedish Board of Trade is interested in assisting Liberia in strengthening trade infrastructure
    - want Integrated Framework (IF) to specify their trade-related needs
    - planning to provide assistance in trade policy development
    - want to provide support in relation to DTIS recommendations
    - could provide assistance in institutional development- in relation to WTO accession

- Japan International Cooperation Agency (JICA)
  - currently implementing projects in health, infrastructure;
  - conducting feasibility study for implementing projects in agriculture and other areas
    - agriculture advisor (from Tokyo) was in Liberia during mission and met with consultant

- African Development Bank (AfDB)
  - currently have an agriculture development project, but does not directly include food safety, animal or plant health
  - intend to develop a project focusing on strengthening capacity of trade-support institutions
  - have projects in health, infrastructure and other sectors

- World Bank
  - have various projects in public sector infrastructure- roads, ports, energy, etc
  - have regional fisheries project (see notes from Fisheries Bureau)
  - have a regional agriculture strengthening project, smallholder tree crops project
  - spoke with forestry person as agriculture person and Trade Facilitation Facility personnel were out of country

- World Trade Organization (WTO)
  - Provided assistance to conduct Biosecurity capacity assessment and to develop project proposal to improve food safety, animal and plant health
  - Providing technical assistance to Integrated Framework program to assist in WTO accession
  - Established a WTO reference center in the Ministry of Commerce and Industry which will provide information on SPS issues

4.3.14. Non- Governmental Organizations (NGOs)/ private sector involvement in Biosecurity in Liberia

4.3.14.1 Liberia Consumer Action Network
- Newly formed umbrella body of all consumer groups in country
- Oldest consumer group is the National Consumers Council of Liberia
  - Want to do more consumer education
  - Works with MOCI, MOH, MOA
  - Participated in BTSF training (as consumer representative)
- Tried to establish a National Steering Committee on Consumer Affairs, including all public and private stakeholders, but only had a few meetings

4.3.14.2 Chamber of Commerce

- Carries out advocacy for businesses, facilitates public-private partnerships, trying to facilitate growth of businesses in Liberia
- Works with US Chamber of Commerce, World Bank
- Serve as resource center for private sector for AGOA and for ASYCUDA
- Have implemented projects with International Labor Organization (ILO)

4.3.14.3 Private sector organizations

- Producer organizations and independent producers
    - Very few producer organizations currently, but beginning to increase
- Exporters of food and agricultural products
    - Have Export Promoters of Liberia, Inc, an NGO promoting (non-traditional) exports
- Importers of food and agricultural products
- Shipping and clearing agents
- Distributors, retailers and traders in food and agricultural products
- Transporters
- Food processors/ water bottlers
- Private sector inspection
    - BIVAC (Bureau Veritas)
        - Has government contract to assist in revenue collection on imports and import inspection (including pre-shipment inspection)
        - From 1997-2004, their contract was with Ministry of Commerce; Since 2005, contract has been with Ministry of Finance
        - In future, would like to have a lab in Liberia for testing imported product quality and safety
    - SGS
        - Conduct inspection, verification, testing and certification of products upon request
        - Provide training in ISO 9001 and other quality programs
        - Also conducts some inspections, works in chain of custody of forestry products (see notes from FDA)

4.3.14.4 Local and International NGOs

There are numerous NGOs working in food and agriculture in country. Listed below are the NGOs visited during the mission, as a representative sample of NGOs operating in Liberia.

- Africare
    - Implementing livestock re-stocking projects, along with many other NGOs
        - Hiring local livestock specialists to provide technical assistance
    - Assisting in rice and cassava production, including some work in pest control

- CARE International
    - Implementing an urban and peri-urban agriculture project; manager of project is a DVM
    - Also implementing conservation agriculture project

- Oxfam
    - Working in water quality and general hygiene
    - Provided laboratory equipment and training to MOH for water quality

- BRAC
    - NGO from Bangladesh, working primarily in micro-finance for women in rural areas
        - Work with farmers in micro-credit schemes to provide assistance in agriculture

5. Communication

The agencies involved in biosecurity in Liberia do have a certain level of informal and formal communication with each other and other relevant stakeholders, much of which is facilitated through the WAQP and EIF activities. The WAQP steering committee meetings, as well as training programs and other related activities provided through WAQP and EIF seem to provide a stimulus for various stakeholders to interact with each other and to communicate on important biosecurity-related issues.

There are also some inter-ministerial efforts to harmonize inspection in food safety, as well as some technical committees that have been established for various biosecurity-related areas, which should help to facilitate communication between the various stakeholders involved in biosecurity-related issues. Liberia does have a National Codex Committee established, which could help to facilitate communication between various biosecurity stakeholders; however, it is not currently active so is not currently facilitating this communication.

Communication with consumers and through the media on biosecurity issues also needs strengthening. The coordinator of the National Consumers Council of Liberia tried to establish a Forum of Consumer Journalists, which would include food safety issues among others, but the group only met once. There are numerous consumer organizations in the country, but only limited amounts of information on food safety, animal and plant health issues seems to be getting out to consumers, either directly through consumer groups or through the media.

High-level/ diplomatic communication on matters related to biosecurity at the regional (such as ECOWAS and African Union- AU) and international level exists, but could be further developed. In particular, ECOWAS is working to harmonize and strengthen food safety, animal and plant health systems in its member countries. Official attending regional and international meetings need to ensure that they effectively share the information discussed at such meetings when they return to Liberia.

Liberia shares (porous) land borders with two French-speaking countries and one English-speaking country. Relationships with these countries are complex, as there are numerous political, military, economic, cultural, and other issues influencing these relationships. Liberia must continue to further strengthen its communication with its neighbors regarding food safety, animal and plant health issues to ensure that biosecurity threats outside its borders do not easily enter into the country.

6. Sectors of biosecurity/risk analysis functions

Core biosecurity- related activities or functions include the following: inspection, verification and enforcement; quarantine and certification; diagnostic services; emergency preparedness and response; and risk analysis.

Most biosecurity related activities in Liberia are undertaken by MOA, MOCI, and MOH. Agencies such as Customs, EPA, FDA, MCC, MOPEA and others also play key roles in their respective areas within the broader topic of biosecurity. More details on the roles of the various agencies involved in

biosecurity- related functions in Liberia is included in Section 4 of this document, the Institutional Framework. Brief information on these functions in each of the biosecurity sectors is included below to give an indication of the situation in each sector.

6.1 Food safety

A number of agencies in Liberia take responsibility for various aspects of food safety, with multiple areas of overlap and a great need for increased coordination. As previously indicated, the National Codex Committee is not functioning, but the WAQP national steering committee does facilitate some collaboration between various stakeholders in food safety. Some other inter-ministerial committees are also aiming to coordinate various food safety functions, as indicated below.

Many stakeholders in the country are interested in establishing a National Standards Body, which would function to establish/adopt food standards, and should help to coordinate various food safety-related activities such as food inspection, verification and enforcement, certification, and eventually risk analysis. These functions are currently spread across many agencies, with serious overlaps and gaps in responsibilities. Such a body would be very useful to the country, to establish food safety standards that adhere to international norms, particularly Codex standards and related texts. The body should also help to ensure that such standards are better monitored and implemented in the country, to ensure the safety of food entering and produced in Liberia.

Inspection, verification and enforcement

As described in the institutional framework section above, MOCI (standards division and inspectorate), MOH, MOA (Quarantine and Animal Resources), and MCC all stated that they are conducting food safety inspections in warehouses, markets, supermarkets, processing facilities, restaurants, and other food establishments. However, it is not clear how much effective inspection at each of these types of facilities is actually being done by each of these agencies. Further, the BNF indicated that they are responsible for inspection of fish and fishery products, particularly at the seaport. MOA Bureau of Animal Resources has full time inspectors working at the livestock slaughter house in Monrovia, even though MOH indicated that it was agreed that MOH should be responsible for inspections once the animal is dead. MOH indicated that they have OEH inspectors posted in the area near the slaughterhouse and that the inspectors come to the slaughterhouse occasionally. The Forest Development Authority (FDA) is also involved in the control of bush meat that is slaughtered, which is an increasingly important food safety issue.

The President of Liberia has given a mandate to the various ministries involved in inspection to harmonize their inspection efforts. In response, the various ministries have divided the city into geographical zones where the different agencies should inspect, on a rotational basis. When interviewing the actual inspectors, they indicated that they now were reducing the frequency of their inspections to 4 times/ year due to complaints from businesses of too many inspections. However, inspectors from the various agencies did not indicate any practice of inspecting in different geographical areas of the city, and the inspectors from various agencies all described the same basic inspection activities as the other agencies.

BIVAC should be responsible for conducting Pre-Shipment Inspection (PSI) of food product imports, and should be conducting destination inspections of products when PSI is not possible. However, BIVAC is focusing primarily on only quantity and price of imported goods, rather than on the quality

and safety of imported food. BIVAC officials indicated that their contract does NOT specifically deal with quality and that there are no national quality and safety standards to which they can compare the products. BIVAC also indicated that their role is inspection only, and that the government should be responsible for any necessary enforcement of regulations and standards.

The government agencies involved in inspection, as listed above, generally indicated that they work with the police force for enforcement of regulations, as needed.

Certification, diagnostic services

MOCI is currently in the process of completing a standards lab, which should be part of the previously indicated National Standards Body. This lab, renovated primarily with funds from UNIDO and equipped with funds from the WAQP, which is financed by the EU and implemented by UNIDO, will have the capacity to conduct analysis in food microbiology, food chemistry, and eventually in metrology. More details on the lab are included in the MOCI portion of the institutional framework section above. No other food testing laboratories are currently functioning in the country, but some agencies did indicate their intentions in this regard. BNF has funds available through a WB project for a lab and establishment of a competent authority to certify that fisheries products are acceptable for export to the EU and other markets.

Currently, very few food products are formally exported from Liberia, therefore export certification is seldom required at this time. In the case of fisheries exports, MOH indicated that they are to be the competent authority for the post-harvest safety of fisheries exports, while BNF also indicated that they intend to be the competent authority for the safety of exported fisheries products. Such roles must be clarified. BIVAC also indicated that inspection of products exported from Liberia is also included in their contract with the Liberian government.

Emergency preparedness and response; risk analysis

Liberia is currently still recovering from many years of civil war, and as such, is in the phase of strengthening its food safety system. In addition to the other capacity building efforts needed, Liberia should strengthen its ability to respond to, and to be prepared for food safety emergencies, as well as to be able to carry out the various aspects of food safety risk analysis.

Overall, there are multiple gaps and overlaps in the entire food safety system, along with an urgent need for strengthened coordination. Accordingly, efforts are underway – encouraged by the WAQP – to develop a standards body in Liberia, which should help to strengthen the food safety system in Liberia.

6.2 Animal health

Before the war, Liberia did have animal health surveillance and diagnostic capacity; however, the fourteen years of civil strife destroyed or reduced to a minimum the veterinary services formerly provided by the government. For example, all the veterinary laboratories and field stations were looted and burned, and most of the veterinarians left the country or were killed during the war.

The MOA Animal Resources unit carries out most animal health functions in Liberia, but their capacity is very limited, with small numbers of workers, very little training of the employees, limited mobility, and almost no equipment for carrying out their duties. Liberia should become a member of OIE as a matter of urgency, so that they can benefit from OIE's Performance, Vision, and Strategy (PVS) assessment and capacity building of national veterinary services. FAO has been providing a great deal of useful assistance in the area of animal health, but continued efforts are needed to further strengthen the animal health system in Liberia.

More details of the agencies involved in these functions are provided in Section 4.3.

Inspection, verification and enforcement

Imports of live animals into Liberia require a live animal import permit and live animal inspection, which is carried out by the MOA officers posted at the entry points. The MOA Animal Resources Livestock officers do conduct some surveillance of animal disease in the country, but their capacity to do so is very limited. A recent FAO project provided training on conducting disease surveillance and how to take samples for laboratory analysis of disease. MOA Animal Resources also has inspectors posted at the slaughterhouse in Monrovia to check for animal diseases in slaughtered animals, as well as to ensure the safety of meat that is consumed.

FDA should also play a role in protecting the health of wild animals, which impacts the health of domestic animals.

Quarantine and certification; diagnostic services

There are currently no functioning animal quarantine facilities in the country. Because the livestock and poultry population in Liberia is so low, almost no terrestrial animals are formally exported from Liberia. However, MOA Animal Resources indicated their responsibility to issue animal health certificates for any exported live animals. Because of its long Atlantic coastline, Liberia has the opportunity to export fish caught in its territorial waters. However, there is currently no agreed competent authority to certify fish exports. Further, a great deal of illegal deep sea fishing currently occurs off the Liberian coast, and the fish are illegally shipped to neighboring countries for export to the world market, thus not providing any benefit to Liberia.

MOA does have a Central Veterinary Laboratory (at Fendell), which has been recently renovated through an FAO project. The FAO project also provided extensive training of the laboratory technicians, but the capacity at the laboratory still must be strengthened. In particular, the government must be able to take over the cost of fuel for the generator for electricity, purchase of reagents, transport for the workers, and similar expenses once the FAO funding is completed. A veterinary clinic was also recently established in Monrovia, which will help to diagnose and treat animal diseases.

Emergency preparedness and response; risk analysis

FAO and other partners have implemented a number of projects to strengthen emergency control of animal disease, including avian influenza, H1N1, and other trans-boundary animal diseases. As a result of a joint FAO/OIE/WHO assessment mission, Liberia developed an Integrated National Action Programme for prevention and response to avian and human influenza, as well as to rebuild and improve its veterinary service. Through the strengthening of its veterinary service, Liberia will also gradually improve its ability to carry out the various components of animal health risk analysis.

6.3 Plant protection

Liberia is a member of the International Plant Protection Convention (IPPC) and therefore can benefit from some of the training and other capacity building in plant protection available through IPPC. The Quarantine unit in MOA serves as the National Plant Protection Organization (NPPO) and also carries out most plant protection functions in Liberia. Their capacity also needs further strengthening, but possibly not as urgently as in animal health. Plant protection is, however, very important to Liberia as it is aiming to increase the production (and reduce post-harvest losses) of staple crops such as rice and also trying to export tree crops and other plant products, which will need to meet the quality standards of importers. The EPA (particularly in biosafety) and the FDA also have some specific roles to play in plant protection. FAO has also been providing assistance in plant production and protection, which is enhanced by the FAO rep's own personal expertise in entomology.

More details of the agencies involved in these functions are given in Section 4.3.

Inspection, verification and enforcement

The MOA quarantine unit has officers stationed at the seaport (part of ship boarding party), airport, some land border posts, and the post office to inspect for any plant pests and for phytosanitary certificates. However, the unit is understaffed and lacks adequate logistical support to effectively carry out inspection of planting materials and other incoming plant products.
People wanting to import pesticides must get permission from MOA quarantine. They are planning to conduct more plant pest and disease surveillance and identification at county level in the future, as their capacity and the capacity of government extension officers increases. FDA has officers posted throughout the country to conduct surveillance of the forests, which should generally include pests to plants and trees. However, pests are reported to not be a large problem in Liberia's hardwood forests.

Quarantine and certification; diagnostic services

There are currently no plant quarantine facilities functioning in Liberia. MOA quarantine is responsible for issuing phytosanitary certificates for plant exports, including for timber and forestry products and properly utilizes IPPC forms and follows IPPC regulations – although they do not have a laboratory- for issuing these certificates. After MOA issues phytosanitary certificates for timber and forest products, FDA will then issue an export permit. LPMC also monitors the quality of the products it exports- mainly coffee and cocoa.

MOA quarantine is aiming to build a lab for plant pest and disease diagnostics, as well as for pesticide formulation analysis, as there are currently not any such facilities in the country. The EPA is planning to strengthen/develop laboratories (possibly at CARI, the University of Liberia, and at EPA) to conduct monitoring of products coming into the country for GMOs/LMOs.

Emergency preparedness and response; risk analysis

FAO assisted in the mobilization of a team of national and regional experts to identify a plant pest, originally thought to be extremely destructive army worms, but later shown to be a less harmful caterpillar species. FAO and other agencies have also implemented some emergency projects to reduce

pests in rice production. The government needs to continue to strengthen its ability to be prepared for and to respond to plant protection emergencies.

MOA's quarantine unit is planning to conduct pest risk analysis (PRAs) in the future. The EPA is also planning to strengthen its capacity to conduct biosafety risk assessments in the future.

6.4 Human Health (zoonoses)

MOH, MOA, and other development partners work together in the prevention and control of zoonotic diseases, including rabies, swine influenza and avian influenza, among others.

7. Stakeholder Analysis

The analysis of stakeholders was carried out as guided by Annex 7 of the *FAO Biosecurity Toolkit*. The roles of different stakeholders are described in detail in section 4.3 of this report and are summarized below (Table 5). Note that for some of the mandates, roles and responsibilities, the stakeholders listed below did not specifically indicate their role in the listed area; however, based on their overall mandate, the consultant determined that they should be responsible for that particular role. (i.e. Responsibilities for policies in Invasive alien species was not specifically discussed, but EPA and MOA- Quarantine should be responsible based on their overall mandate).

Table 5: Current institution mandates, roles, and responsibilities

Roles and mandates	**Responsible institutions and agencies**
Formulation of policies and legislation	
Public health	MOH
Food safety	MOH, MOA, MOCI, MCC
Animal health	MOA- Animal Resources and Quarantine
Plant health	MOA- Quarantine
Environment	EPA
Invasive alien species	EPA, MOA- Quarantine
Biosafety and biotechnology	EPA
Fisheries	BNF
Forestry	FDA
Implementation and enforcement	
Public health	MOH
Food safety	MOH, MOA, MOCI, MCC
Animal health	MOA- Animal Resources and Quarantine
Plant health	MOA- Quarantine, FDA
Environment	EPA, FDA
Invasive alien species	EPA, MOA- Quarantine, FDA
Biosafety and biotechnology	EPA
Fisheries	BNF
Forestry	FDA
Services (Regulatory, research, diagnostic and certification)	
Quarantine	MOA-Quarantine
Risk Analysis	MOH, MOA-quarantine and animal resources, EPA
Standards setting	Standards Body - once established;

	currently the responsibility of individual line ministries
Diagnostic services	MOCI Standards lab (once completed), MOH (water quality now), MOA-Animal Resources, other labs in planning stages
Biosafety/biotechnology	EPA
Research and scientific advice	CARI, Univ of Liberia
Early warning on food-borne disease outbreaks	MOH
Monitoring and surveillance	MOH, MOA- Animal Resources and Quarantine, FDA, MOCI
Advocacy and trade	MOCI, MOPEA, Customs
Inspections and Certification	MOH, MOCI, MOA-Animal Resources and Quarantine, MCC, BNF, FDA

8. SWOT Analysis

Based on the assessment mission to Liberia (5-23 July 2010), the international consultant conducted a SWOT analysis of the general Biosecurity/SPS system in Liberia, as shown in Table 6.

Table 6. SWOT analysis of the Biosecurity/SPS system in Liberia

STRENGTHS

- Institutions in various sectors of Biosecurity exist and are functioning (but need strengthening)
- Some relevant sectoral legislation is in place and efforts underway to update policies and legislation
- Stakeholders have growing understanding of standards and quality issues and need to improve biosecurity, through WAQP, FAO, WTO and other training opportunities
- Some committee structures exist in biosecurity areas, such as the Codex committee, biosafety committee, technical committee on water, etc, but need strengthening
- WAQP national steering committee does meet regularly, is composed of diverse stakeholders involved in SPS system, and disseminates information to all stakeholders
- WAQP NTC and EIF national coordinator are both very competent in their area, active, have good secretarial support, and have the drive required to strengthen the SPS system
- Appears to be high-level governmental support for establishing a standards body, and generally for improving food safety, animal and plant health
- Inspectors are in place at some entry points throughout country; efforts being made at ministerial level to harmonize inspections, including in food safety
- MOA- quarantine is utilizing IPPC forms for plant export certification
- Receiving assistance through various projects (WAQP, BTSF, FAO, etc)
- Construction of standards laboratory is nearly completed, 2 qualified staff have been recruited
- Support of Ministers of Agriculture, Health, and Commerce to conduct this assessment and develop project proposal to strengthen SPS system.
- WTO reference center recently opened- should also increase information available in country on SPS issues
- Ministries of Agriculture and Health both have implemented mechanisms to better coordinate input of external donors and aid agencies

WEAKNESSES

- Extremely limited understanding of Codex Alimentarius, the SPS Agreement, and general

food safety, animal and plant health principles in the country;

- National Codex Committee does NOT currently meet regularly; no Codex secretariat or external chair of committee (focal point also serves as chair); no national SPS committee; no coordination mechanism for biosecurity/SPS- related areas
- Codex committee does NOT currently have a very broad representation of stakeholders: should have consumer organizations, private sector, technical experts, relevant public sector
- Currently have very limited participation in Codex, IPPC, or similar activities at regional and international levels; those that do participate in external meetings or training are often not the correct technical person; few returnees share information/ training gained with others in the country
- Most SPS-related policies and legislation are outdated and require revision; in some cases, completely new legislation needed; only a few standards have been adopted.
- No strong legislation in place for enforcement of SPS-related standards
- Consumer and general public knowledge about food safety, animal and plant health is extremely limited; media does not appear to be actively involved in sharing accurate information on SPS issues;
- Liberia is not yet a member of OIE; animal health system in country needs strengthening; absence of a recent comprehensive assessment of the animal health or plant health systems
- Lack of capacity in biosecurity: technical skills, human capacity, resource allocation
- Lack of a single national standards body/bureau to develop standards
- Urgent need for reduction of overlaps, improved coordination, and extensive training of food safety inspectors; other biosecurity functions should also be better coordinated and communication between institutions improved
- Limited control of borders to prevent pests, disease, unsafe food from entering
- Only a few laboratories even functioning in public sector (vet lab, water quality in MOH, EPA has a lab that is not currently functioning); no labs internationally accredited
- Lack of research in biosecurity- related areas
- No functioning animal or plant quarantine facilities in the country

OPPORTUNITIES

- Available support of WTO, FAO, WHO, UNIDO, WB, EU, USAID, SIDA, AfDB, NGOs, and other agencies to strengthen food safety, animal and plant health
- Growing interest of donors and implementing agencies in agriculture generally and in biosecurity-related issues
- Member of Codex, IPPC, ISO, signatory to Cartagena Protocol, WTO accession underway
- Huge potential exists for food and agricultural exports, at regional and international levels
- Regional organizations (AU, ECOWAS) promoting improved harmonization and strengthening of food safety, animal and plant health; in particular, ECOWAS activities help to develop strong working relationships at regional level to strengthen biosecurity
- Useful recommendations from Diagnostic Trade Integration Study (DTIS)
- Existence of over-arching Poverty Reduction Strategy, Liberia Agriculture Sector Investment Program, and related plans in agriculture and trade

THREATS

- Competition for limited funds with other important national initiatives, such as basic infrastructure, primary education, and health
- Erosion of institutional memory and experience with high rate of staff attrition and skills from SPS-related agencies, partially due to improved job opportunities outside of government
- Rapidly changing standards of trade partners, which are becoming increasingly stringent (EU, US, China, etc)
- Emerging plant and animal diseases, food contaminants

- Trans-boundary animal and plant diseases present in neighboring countries, limited biosecurity control in those countries, limited coordination with neighboring countries
- World economic recession reduces availability of donor funding and trade opportunities

9. Conclusions and Recommendations

The food safety, animal and plant health system in Liberia has been greatly weakened by nearly 15 years of civil strife and requires extensive strengthening, which was recognized by all of the stakeholders visited during this assessment. Liberia also has vast natural resources and exciting potential for agricultural production, which can reduce dependency on food and agricultural imports (which are often of inferior quality) and can also be exported to lucrative foreign markets. Further, importing countries have shown great interest in buying products from Liberia and have included the country in preferential market access schemes such as the African Growth and Opportunity Act (AGOA). However, these importing countries have strict quality and safety requirements which must be met in order to take advantage of these lucrative trade opportunities. In addition, Liberia is particularly vulnerable to increased pests and diseases, including food-borne illnesses, due to its porous borders, high levels of imported food, and extensive movement of people, goods, and animals to and from the neighbouring countries, with little or no SPS control at the borders.

Therefore, Liberia must urgently strengthen its food safety, animal and plant health system to protect domestic consumers (and domestic animal and plant health) and also to expand opportunities for exports. Continued efforts must also be made to better coordinate the prevention and management of threats to food safety, animal and plant health, including in the areas of policy, legislation, inspection services, laboratory analysis, and hygienic practices of producers and processors. The country should emphasize the prevention of these threats, rather than dealing with resultant outbreaks and problems that may occur.

A strategic plan to strengthen this system has been developed (see section 10 below), as well as an accompanying project proposal to address key items of the plan. Stakeholders in Liberia should review and revise this plan, as appropriate, and ensure the technical and financial support of various donors to implement the various elements of the strategic plan, particularly the project proposal developed. Some of the key recommendations to strengthen the system are as follows:

- A single national standards body should be created to establish standards, and also to assist in the coordination of food safety, animal and plant health matters. The body should also be provided with adequate resources (human, financial, technical, etc) to have long-term effectiveness
    - The body could *oversee* certain functions related to food safety, animal and plant health, while some functions could be *carried out* by the institution currently carrying them out, if they have adequate capacity, but through an MoU with the coordinating body

- The roles of various agencies in certification and other functions, such as the competent authority for fisheries exports need to be clarified.

- The National Codex Committee must be strengthened, and could also serve as the national SPS committee; many members of the current WAQP national steering committee should be involved in the Codex committee

- A food hygiene awareness campaign should urgently be undertaken by the existing line ministries and agencies working in this area, prior to and while other activities to strengthen the SPS system are ongoing.

- Other projects and agencies should concentrate on strengthening existing functioning laboratories in the country (such as the Standards Lab once completed), rather than building, equipping, and staffing additional laboratories. The standards lab must continue to be strengthened through allocation of government funds for its long-term maintenance.

- The government must continue in their efforts to harmonize and strengthen inspections conducted in Liberia, and as a matter of urgency, ensure that this allocation of inspection duties is actually carried out by the inspectors

    - Inspectors need continued training on conducting effective and ethical inspections

    - A great deal of overlap is occurring, even within Ministries; need to streamline actions

- Liberia should become a member of OIE so that they can benefit from an OIE assessment and receive support from OIE in strengthening their veterinary services. The animal health system in the country must be strengthened as a matter of priority.

- The government of Liberia must ensure that the assistance of external partners (donors, NGOs, technical assistance organizations) in this area is well coordinated and utilized effectively.

- SPS-related policies and legislations must be reviewed and updated accordingly. Policies and legislation in draft form should be adopted and implemented as soon as possible.

- All stakeholders, including consumers, producers, processors, importers, government officials, etc, must be further sensitized on the importance of biosecurity for Liberia

- Academic institutions working in areas related to food safety, animal and plant health in Liberia must be extensively strengthened and better integrated into the Biosecurity system
    - Government agencies should work to hire more graduates from these programs and provide their expertise to assist in training the students.
    - These academic institutions could also be better integrated with the government research and extension programs, as well as in the Codex/SPS committee to better train and utilize human capacity in Liberia.
    - Tertiary academic programs in food safety, animal and plant health must be strengthened, including training of faculty and provision of scholarships to students.

10. Proposed 5-year Biosecurity National Action Plan for Liberia

Based on the consultant's assessment mission in Liberia (5-23 July 2010) and her experience in working in this area in other countries, the consultant has developed a draft proposed 5-year

Biosecurity/ SPS action plan for Liberia (Table 7). Parts of this plan are included in the project proposal drafted by the consultant, while other portions of the plan can be included in other project proposals. All relevant stakeholders in Liberia are called upon to actively comment and revise this plan to ensure that it fits the needs and the vision of the country. In particular, the time-frame and priority rankings for each item were assigned by the consultant and should be reviewed and revised by national stakeholders.

Table 7: Draft version of a 5-year strategic National Action Plan to address the National Biosecurity/SPS Capacity Building Needs

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking

Policy Framework
• A few fragmented policies related to Biosecurity exist across various sectors.
• Some policies in place are outdated.
• No integrated policy on Biosecurity exists.
• Existing policies related to biosecurity
  • DRAFT Occupational and Environmental Health Policy (includes some food safety)
  • DRAFT Fisheries Policy
  • DRAFT Food Inspection Policy (MOA)
  • Agricultural Policy (MOA)
  • Forestry Policy (FDA)
  • DRAFT Biosafety Policy (EPA)
  • Environmental Protection Policy (EPA)
	Policy in place for standards body/ coordination of Biosecurity
	
	Review various sectorial policies to be consistent with integrated Biosecurity concept.
		- Standards body/ overall biosecurity policy development
		- Gaps/ overlaps/ inconsistencies in various sectorial policies.
		- Outdated information does not apply to current situation.
			1. Develop a policy for a standards body, as well as for an integrated overarching Biosecurity system, including stakeholder consultations.
			- include legal practitioners to assist in developing policy framework.
			- look at examples of Biosecurity policies from other countries.
			- ensure adequate political will to implement
			2. Review/ alignment of sectoral policies to harmonize with each other and the biosecurity needs in the country.
			- hire a consultant to assist in reviewing sectoral policies and legislation
			3. Enact policies in draft form, particularly after review and alignment process
			4. Hold a national workshop to disseminate adopted policy and raise awareness of Biosecurity approach
				1. Technical coordinator of project
				2. Standards body (when implemented) to request donor assistance to hire a consultant
				3. Ministries responsible for draft policies
				4. All relevant institutions
					AfDB, WB, FAO, WHO, STDF	1. 1-2
						2. 2-4
						3. 1-4
						4. 4
							1. 1
							2. 2
							3. 2
							4. 3

Note: Priority rankings:
1= high priority; 2= medium priority; 3= lower/ longer-term priority

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical Financial Support	Time-frame (year#)	Priority ranking
<u>Regulatory Framework</u> • Fragmented legislation in various sectors of Biosecurity. Legislations in place often outdated. • Preliminary list of current legislation: - National Public Health Law- includes some information on food safety (1976; MOH) - Environmental Protection Act (EPA); working on approval process for regulations, guidelines, and standards - Natural Resources Law (1956; BNF) - DRAFT Fisheries legislation and regulations (BNF) - Agriculture Act (1950; revised in 1971; MOA) - DRAFT Agriculture Act (MOA) - Forestry Law (2006; FDA) - DRAFT Wildlife Law(FDA) - DRAFT Biosafety Act (EPA), also includes implementing guidelines, regulations - Commerce and Industry Act (1962; MOCI) - Ministry of Finance Revenue Code (2002; MOF) - Monrovia City Corporation Ordinance on Public Health and Sanitation (1988, MCC)	Have an Act to establish a standards body and improve coordination in biosecurity-related areas; any overarching Act should recognize the various sectorial Acts Various legislations aligned with International requirements and current national situation.	-Any standards body needs strong legislative under-pinning -Acts from various sectors should be aligned and updated as necessary - Lack of capacity (human and infrastructure- such as laboratories) to implement and enforce various Acts	1. Develop and enact an Act to establish a standards body 2. Review various legislations related to Biosecurity to identify any gaps, overlaps, or inconsistencies; amend legislations in view of that review and ensure alignment with international requirements. Must recognize initiatives of other regional/ international organizations, such as ECOWAS review of legislation. 3. Enact any draft legislation	1. Technical coordinator of project 2. Relevant institutions, to be prompted by Standards Body 3. Relevant ministries	AfDB, WB, FAO, WHO, STDF, WAQP	1. 1-2 2. 1-4 3. 2-4	1.1 1.1 1.2

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
Organizational Arrangements • Some aspects of Biosecurity are coordinated, but many need more coordination. • Numerous agencies responsible for various aspects of Biosecurity, but are not integrated with each other. • A few different (fragmented) committees/bodies exist to deal with issues of Biosecurity; committees should be better integrated at national level. • National Codex Committee in place, but is not active and does not include all relevant stakeholders • No SPS committee existing; WAQP national steering committee is currently most active and effective body working in SPS area • No agency mandated to set standards • Agencies are centralized; most not present at borders or have limited presence • More details on organizations involved in section 4 of report	Standards Body is established and functioning well, helping to integrate biosecurity activities in Liberia. Roles and responsibilities of stakeholders involved in biosecurity are clearly defined and understood. Each agency involved has the capacity and drive to effectively carry out its mandate.	1. Establishment of standards body 2. Clarification of roles and responsibilities of different agencies and other stakeholders involved in biosecurity (e.g. MoA, MOCI, MoH, EPA, FDA, private sector, etc.) 3. Strengthening and formalizing linkages between stakeholders involved in various aspects of biosecurity. 4. Review mandate, structure and capacity of various agencies based on current responsibilities 5. Need for capacity building, including training and equipment	1. Establish standards body and ensure its continued active operation 2. Define roles and responsibilities, develop and agree on procedures for collaboration and interaction between stakeholders involved in biosecurity, including food inspection and others. 3. Obtain stakeholder consensus and high-level commitment on respective biosecurity roles and responsibilities. 4. Conduct needs assessment of various agencies to assess their needs for equipment and training; carry out training and equipping as appropriate	1. GoL 2. Standards body/ other coordinating mechanism 3. Standards body/ other coordinating mechanism 4. Relevant agencies to coordinate	WB, AfDB, SIDA, FAO, OIE, IPPC, STDF, WAQP	1.1-5 2. 1-3 3. 2-4 4. 1-5	1. 1 2. 1 3. 1 4. 2

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
Communication • Agencies involved in biosecurity have some informal and formal communication with each other and other relevant stakeholders. • Communication on cross-cutting aspects of biosecurity handled through various meetings and committees. However, communication on biosecurity is generally not systematic. • Some high-level / diplomatic communication on matters related to biosecurity at regional (such as ECOWAS) and international level exists but regional collaboration on trans-boundary issues needs strengthening. • Little risk communication exists, needs strengthening. • Low involvement of the media in publicity of biosecurity issues	- Communication between agencies involved in Biosecurity coordinated through Standards Body/ other coordinating mechanism - Effective communication on biosecurity with international agencies (FAO, OIE, WHO, WTO, etc)	Strengthening of Codex contact point, developing SPS enquiry point Initiate biosecurity linkages and communication at national and international level, including mechanism for communication with regulatory agencies in neighboring countries Define and engage stakeholders that are important for communication in biosecurity Develop appropriate measures to create awareness on biosecurity to the general public	1. Develop and implement an effective national communication strategy for Biosecurity. This will include improving coordination and communication within and between various agencies involved in biosecurity. Sensitize politicians to raise awareness of biosecurity issues 2.Strengthen a Codex contact point/SPS enquiry point: develop work plan, secure budget, implement work plans 3. Create awareness among internal/external stakeholders on WTO SPS Agreement 4. Increase involvement of media in Biosecurity issues/ advocacy 5. Development of IEC materials on food safety and biosecurity (billboards, posters, etc) 6. Incorporation of food safety/ biosecurity issues in primary, secondary, and tertiary schools' curricula	1. Standards body 2. Standards body 3. MOCI, MOA, MOH, standards body 4. Standards body, all relevant stakeholders 5. Standards body, MOH, MOA 6. Standards body, Min of Education	STDF WTO FAO, WHO, WB	1. 2 2. 1-2 3. 1-2 4. 1-5 5. 3-5 6. 3-5	1. 2 2. 1 3. 1 4. 2 5. 2 6. 3

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
<u>Inspection, verification and enforcement</u> • Food safety inspections are carried out by MoH, MoCI (2 groups), MoA (2 groups), MCC • Extensive overlaps and gaps in food safety inspections • Customs involved in enforcement • Animal health inspection carried out by MOA-animal resources; plant health by MOA-quarantine. • FDA carries out inspection of wood and wood products, non-wood forest products • Inspectorates face a number of challenges (shortage of inspectors; inadequate facilities and tools; lack of transportation, few inspection guidelines, little training on modern inspection techniques, etc.) • Police force assists in enforcement, but enforcement not well backed by legislation	Inspection, verification, and enforcement is efficient, coordinated (with other biosecurity-related agencies and other entry point agencies), and carried out consistently with international standards and recommendations in order to meet national needs and standards	• Upgrade technical capacity of inspectorate • Development and use of appropriate guidelines and procedures for inspection to ensure consistency • Address shortage of inspection equipment (as possible-equipment for real time field detection especially at entry points) and mobility constraints • Require penalties that are deterring	1. Clearly define the roles of various agencies involved in Biosecurity inspections, including food safety, animal/fish health and plant health/forestry inspections; Strengthen collaboration of inspectors from different agencies. Ensure that inspectors carry out agreed tasks 2. Implement a system where inspector salary is based on satisfactory performance 3. Develop inspection guidelines based on existing international manuals (e.g. FAO inspection manuals) for use by inspectors 4. Provide training on inspection guidelines, modern inspection techniques, ethics of inspection, etc 5. Provide inspection equipment to inspectors (i.e. thermometers, gloves) 6. Food handlers and food establishment owners to be sensitized on food safety	1.Ministerial inspection task force/ standards body 2. Ministerial task force, each inspection agency 3. Standards body/ each agency 4. Standards body/ each agency 5. Each agency 6. MOH, MOA, MOCI	FAO, WHO, WB, WAQP SIDA EU USAID	1. 1-2 2. 2 3. 3 4. 1-5 5. 3-5 6. 1-5	1. 1 2. 2 3. 2 4. 1 5. 3 6. 1

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
<u>Quarantine and certification</u> • No plant or animal (or fish) quarantine facilities currently functioning • MoA has mandate for quarantine of live animals and plants, as well as animal and plant health certification (including phytosanitary certification of forest products) • MOH and BNF discussing who has mandate for certification of fish product exports • Unclear which ministry would have mandate for certification of any (future) food exports	Effective quarantine and certification systems exist that are capable of preventing the entry and establishment of pests and diseases, and increase export market access. Good coordination between countries in quarantine and certification.	• Establish animal and plant quarantine capacity (skills and infrastructure) • Clarify which agencies are responsible for certification of fish and food exports • Strengthen coordination between agencies to be involved in certification	1. Establish plant and animal quarantine facilities, particularly near major entry points for plants and animals 2. Develop standard procedures for quarantine operations; provide training on conducting quarantine procedures. 3. Clarify roles for fish and food export certification agencies	1. MOA 2. MOA 3. MOH, BNF, MOCI	FAO IPPC STDF OIE WB	1. 3-4 2. 2-5 3. 1-2	1. 2 2. 2 3. 1

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
Diagnostic services • MOH (water quality) and MOA (vet lab) have functioning labs, but need strengthening • No plant diagnostic lab • Standards lab (MOCI) to test food micro and food chemistry is nearing completion; metrology lab will developed in future • BNF has funds through WB for a fisheries lab • EPA has an air and water quality lab with new equipment, but technicians do not know how to use • EPA aiming to establish labs for GMO/Living Modified Organisms (LMO) detection • No functioning labs in FDA or academia • No diagnostic testing capability at entry points • Lab staff in all of country is very limited, most need extensive training • No labs in country are internationally accredited	Food safety, animal health and plant health laboratories are operating efficiently and in coordination with each other, and are accredited as appropriate. Laboratories and government understand their role in helping to strengthen biosecurity Diagnostic testing capability at major entry points (seaport and main land border posts)	• Upgrade capacity of laboratories • Labs need to be internationally accredited • Inadequate qualified staff and equipment • Establishment of diagnostic testing capability at major entry points • Need to ensure that labs with overlapping functions are NOT built in the future	1. Complete Standards lab (food micro and food chem) and ensure it has adequate resources to continue to maintain and improve itself 2. Train lab technicians on lab skills, as well as on proper use and maintenance of available equipment 3. Ensure that other projects and agencies do NOT build duplicative laboratories to those already existing, at least until one lab is able to function at maximum capacity. 4. Develop plan for accreditation for appropriate labs as long-term goal. Will include development of Standard Operating Procedures, quality manuals, etc. 5. Establish diagnostic testing capabilities at major entry points 6. Complete metrology lab in Standards Lab	1. MOCI/ standards body 2. Ministries with labs 3. All relevant ministries 4. MOCI, MOA, other relevant ministries 5. MOCI, MOA, MOH, standards body 6. MOCI	FAO, WB, WAQP STDF, SIDA, EU, USAID	1.1-5 2. 1-5 3. 1-5 4. 2-5 5. 4-5 6. 3-5	1. 1 2. 1 3. 1 4. 1 5. 3 6. 2

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
Emergency preparedness and response • Numerous projects implemented to strengthen emergency control of animal disease • Integrated National Action Programme for prevention and response to avian and human influenza in place. Could possibly be applied to other emergency situations. • FAO assisted in mobilization of team to correctly ID plant pest in emergency situation (first thought to be army worms) • Donors have implemented some emergency projects to reduce pests in plant production • Basically no preparedness for, limited ability to respond to food safety emergencies • Weak cross-border epidemic collaboration.	Sound systems in place to prevent and as necessary respond to biosecurity emergencies	Clarify roles and responsibilities of different stakeholders in biosecurity emergency situations	1. Ensure that Integrated National Action Plan for avian and human influenza is functioning optimally. 2. Develop plan to prevent and respond effectively to plant protection emergencies. 3. Utilize FAO tool for national preparedness for food safety emergencies to develop preparedness plan 4. Regularly (~yearly) update and discuss emergency response plans 5. Strengthen cross-border collaboration, in emergency preparedness and response	1. MOA 2. MOA 3. MOA, MOH. MOCI 4. MOA, MOH, MOCI 5. MOA, MOH, MOCI	WB FAO OIE WHO STDF	1. 1-4 2. 4 3. 3 4. 4-5 5. 3-5	1. 2 2. 3 3. 2 4. 3 5. 2

Current situation	Future Goal	Needs / Gaps	Suggested Actions for Follow-up	Suggested Responsibilities	Possible Technical / Financial Support	Time-frame (year#)	Priority ranking
Risk analysis • Extremely limited knowledge and specialized skills on components of risk analysis (risk assessment, risk management, risk communication) for use in food safety, animal health, plant health and biosafety • MOA-quarantine has plans to conduct pest risk analysis in future • EPA planning to strengthen capacity to conduct biosafety risk assessments in future	Biosecurity decision-making is based on risk analysis All sectors should be involved in and receive appropriate risk communication	Development of knowledge and skills on principles and use of risk analysis in food safety, animal health, plant health and biosafety	1. Training workshop on concept of risk analysis (risk assessment, risk management, risk communication) in biosecurity using available FAO training manuals 2. Sectoral training on use of risk analysis in different biosecurity sectors, particularly in plant protection 3. Training in biosafety risk assessments	1. Standards Body 2. MOA, MOH 3.EPA	FAO OIE IPPC WHO CBD	1. 4 2. 3 3. 2	1. 3 2. 2 3. 2

Annex 1

Persons met during mission (5-23 July 2010)
Londa Vanderwal- Liberia- STDF/PPG/324

*Note that unless indicated, the phone numbers are in Liberia (country code +231). The leading 0 in the listed in Liberian phone numbers should be removed when dialing these numbers internationally.

Consultative Meeting participants (9 July 2010)

Name	Organization	Role	Phone	Email	Address/ URL
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Sei Ghan	Ministry of Commerce and Industry	Assistant Ministry for Industry	06 512 488 04 710 567	wonkemie532002@yahoo.com; swgahn@moci.gov.lr	(As above)
Clara Doe Mvogo	UNIDO/ Ministry of Commerce	National Technical Coordinator of WAQP; One of main counterparts for STDF project	06 445 160	cdmvogo@hotmail.com	Ministry of Commerce and Industry, Ashmun/ Gurley Streets, Monrovia
Amin Modad	Integrated Framework National Implementation Unit	EIF focal point; Also one of main counterparts for STDF project	077 425 002; 06 418 218	amodad123@yahoo.com	Rose Garden Building, Broad Street, Crown Hill, Monrovia
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Stephen Mambu	Standards Laboratory	Head of Food Chemistry Lab; national consultant for STDF project	06 246 161	mambusteve@yahoo.com	Ministry of Public Works compound, Monrovia

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Wounpay Doe	Ministry of Finance/ Customs	Analyst	06 571 677		Broad Street, Monrovia
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Earl Neblett	Environmental Protection Agency (EPA)	Supervisor for Environmental Quality and Standards, Dept. of Monitoring and Assessment	06 546 345	neb_ear@yahoo.com	Tubman Boulevard, Sinkor, Monrovia

Others met during mission

Name/ Date met (all in 2010)	**Organization**	**Role**	**Phone**	**Email**	**Adress/URL**
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Tonieh Alpha/ 6 July	Integrated Framework National	Administrative Assistant	077 425 002;	Tu_2ee@yahoo.com	Rose Garden Building, Broad Street, Crown Hill, Monrovia

	Implementation Unit				
Gulu Gwesa/ 6 July	Standards Laboratory	Head of Food Microbiology Lab	06 676 155	ulug530@yahoo.com	Ministry of Public Works compound, Monrovia
Paulinas Koffie/ 7 July	Aqua Life water bottling company	General Manager	06 826 730		Red Hill, Greater Monrovia
Augustine Paywala/7 July	Aqua Life water bottling company	Laboratory Manager	06 826 730		Red Hill, Greater Monrovia
Ali Merhi/ 7 July	Blue Lake water bottling company	General Manager	05 672 672	a_merhi@hotmail.co.uk	Bomi County
Emmanuel Doubla/ Jacob Brown/ 8 July	Club Brewery	Laboratory technician/ Laboratory manager	06 516 399		Greater Monrovia
Peter Lowe/ 8 July	World Bank	Forestry Coordinator	06 937 144	plowe@worldbank.org; peter.lowe@yahoo.co.uk	Bright Building, Mamba Point, Monrovia; www.worldbank.org
Dr. Peter Clement Lugala/ 8 July	World Health Organization	Environmental Health Advisor	06 522 998	clementp@lr.afro.who.int; clug@2@yahoo.co.uk	J& E Building, Sekou Toure Ave, Mamba Point, Monrovia
Jefyne Bates / 9 July	Arjay Farms, Aquarius Water bottling	Assistant Manager	06 693 917		Careysburg, Monteserrat County
Shitau Miura/ 10 July	Japan International Cooperation Agency (JICA)	Project Formulation Adviser (current leader of office in Liberia)	0770 77954/5-6; 06 266 484	Miura.Shitau@jica.go.jp	UNHCR/Haider Building, Mamba Point, Monrovia; www.jica.go.jp
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Kie Maegawa/ 10 July	Japan International Cooperation Agency (JICA)	Local Consultant	0770 77954/5-6; 06 459 742	MaegawaKie.GN@jica.go.jp	UNHCR/Haider Building, Mamba Point, Monrovia;

					www.jica.go.jp
Gabriel Bedell/ 12 July	Export Promoters of Liberia, Inc (NGO)	Manager	06 560 954		Monrovia
George Lansana/ 12 July	Africare	Finance Manager	077 130 901; 06 415 496	georgelansana@yahoo.com	Monrovia; www.africare.org
Ralph Woods/ 12 July	Africare	Agriculture Project Manager	06 530 706; 077 035 466		Monrovia; www.africare.org
Macaetoh Wreh/ Henrique Harvey/Benedict Wreh/ 12 July	Ministry of Commerce-Inspectorate Division	Inspector General (IG)/ Deputy IG/ Coordinator of Port Inspection	06 912 109		Ashmun/Gurley Streets, Monrovia; www.moci.gov.lr
Anjad Tunis/ 12 July	Bureau Veritas/ Bureau Inspection Valuation Assessment Control (BIVAC)	Head of BIVAC port inspection	06 589 507		Freeport, Monrovia
Anwar Ezedine/ 12 July	United Commodities Inc	Chief Executive Officer	05 448 245	united_commodities @yahoo.com	Freeport, Monrovia
Ivan Muir/ 13 July	SGS	Managing Director	077 874 352; 06 874 352	Ivan.muir@sgs.com	27 Old Town Road, Congo Town, Monrovia; www.sgs.com
Aboyoma Grant/ 13 July	EPA	Acting lab supervisor	06 531 903		Tubman Boulevard, Sinkor, Monrovia
Henry Bernard/ 13 July	BIVAC	Deputy Managing Director	06 513 829; 06 226 491		Broad Street, Monrovia
Dehwehn Yeabah/ Joseph David/ 13 July	Ministry of Health and Social Welfare	Director, Environmental and Occupational Health Division/ Assistant	06 669 906	doyeabah@yahoo.com	Capital By-Pass, Monrovia

		Director for Admin.			
Abdul Razak/ 13 July	FAO	Emergency Coordinator	06 784 870	abdul.razak@fao.org	UN drive, Mamba Point, Monrovia
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Yevewuo Subah/ 14 July	Bureau of National Fisheries, Ministry of Agriculture	Coordinator	06 517 742	yevewuozsubah@yahoo.com	Bureau of National Fisheries, Freeport, Monrovia
Joseph Anderson/ 14 July	Ministry of Agriculture-Technical Department	Coordinator of Veterinary Unit	06 540 023; 077 361 200	joeelson2000@yahoo.com; jrnanderson@moa.gov.lr	Somalia Drive, Monrovia;
Nykoi Jomah/ 14 July	Ministry of Agriculture-Technical Department	Livestock Officer			Somalia Drive, Monrovia
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Edward Fatoma/ 14 July	(As above)	Veterinary Assistant	06 973 751		Somalia Drive, Monrovia
Solomon Browne/ 14 July	(As above)	Acting Director-Bureau of Animal Resources	04 710 358		Somalia Drive, Monrovia
Chea Garley/ 14 July	(As above)	Assistant Minister-Technical Department	06 574 465		Somalia Drive, Monrovia
Lawrence Massaquoi/ 14 July	(As above)	(Plant) Quarantine-Assistant Director	06 543 623	lawrence.massaquoi@yahoo.com	Somalia Drive, Monrovia
Edward Camara/ 15 July	Forestry Development Authority	Manager for marketing and forest revenue protection	06 823 646		Lonestar Compound, Sinkor

Johansen Voker/ 15 July	Environmental Protection Agency	Manger, Planning, Policy & Legal Affairs; Biosafety Contact Point	06 520 042	vokerj@yahoo.com	4th Street, Tubman Blvd, Sinkor, Monrovia; www.epa.gov.lr
Roosevelt Gweh/ 15 July	Ministry of Agriculture	Central Veterinary Laboratory- Lab Supervisor	06 380 064		Fendell, Monteserrat County
Adolfo Cires Alonso / 16 July	European Union	Food Security and Rural Development	077 731 776	Adolfo.CIRES-ALONSO@ec.europa.eu	UN Drive, Mamba Point, Monrovia
Carlos Battaglini/ 16 July	European Union	Food Security and Rural Development		Carlos-Adolfo.BATTAGLINI-MANRIQUE-DE-LARA@ec.europa.eu	UN Drive, Mamba Point, Monrovia
Dr. L.I. Braimah/ 16 July	World Bank	National Coordinator for Regional Fisheries Project	088 064 1617		Bureau of National Fisheries, Freeport, Monrovia
Francis Tamba/ Henry Lawray/ 16 July	Ministry of Health and Social Welfare	Food Unit-Coordinator/ Assistant Coordinator	06 520 94/ 077 059 806	fftamba@yahoo.com	Capital By-Pass, Monrovia
Lasana Donzo/ 19 July	Ministry of Commerce and Industry	Assistant Director, Standards Division	06 524 311		Ashmun/Gurley Streets, Monrovia; www.moci.gov.lr
Francis Mwah/ 20 July	Ministry of Agriculture	Agro-Industrial Development	06 678 266	fwmwah058@yahoo.com	Monrovia
Hon. Nyah Mantein/ T Roosevelt Blatty/Sam Allison/ 20 July	Liberian Produce Marketing Corporation	Managing Director/ Standards Division/ Director of Procurement	06 690 937; 06 937 356	bgmchildren@yahoo.com	Freeport, Monrovia
Samuel Saki/ John Clemme/ 20 July	Premier Flour Mill	Production Manager/ Laboratory Manager	06 892350		Somalia Drive, near Freeport, Monrovia
Tarence Kpaper/ 21	Ministry of Agriculture	Meat inspector at Abbatoir	06 594 432		Abbatoir near Freeport, Monrovia

July					
Bella Diallo/ 21 July	MSP Business Center/ Chamber of Commerce	Chairman/ Executive Council Member	06 998 728; 06 585 216; 077 753 226	Southwesttradingcompany @yahoo.com	UN Drive, Water Side, Monrovia
Anthony Taplah, Sr/ Matthew Kamara/ 21 July	University of Liberia, College of Agriculture	Assistant Professor, Forestry Department/ Assistant to the Dean	06 511 043	anthony.taplah@ euroliberialogging.com; anthonytaplah@yahoo.com	Fendell Campus
Henry Wolokolie/ 21 July	National Consumers Council of Liberia	National Coordinator	06 666 668; 077 090 406	henrypwolokolie@yahoo.com	Standard Stationery Store Building, Broad Street, Monrovia
Cecil Nartey/ 21 July	African Development Bank	Principal Country Programme Officer	+232 76 541 328	c.nartey@afdb.org; cecilnartey@hotmail.com	Freetown, SIERRA LEONE; www.afdb.org
Rogers Lubunga/ 20 Jul	African Development Bank	Agriculture Program coordinator		r.lubunga@afdb.org	Tunis, TUNISIA
Abraham Garneo/ Joshua Williams/ 22 Jul	Monrovia City Corporation	Waste Management & Sanitation-Manager/Assistant	06551954	abrahamgarnoe@yahoo.com	MCC Compound, Mamba Point, Monrovia
Joseph Weah/ 22 July	Pharmacy Board of Liberia	Chair of West African Quality Program Steering Committee	06539698	josephweah19@yahoo.com	Camp Johnson Road, Yes Building, Monrovia
Roland Morris/ 22 July	Ministry of Commerce and Industry	Consultant- Intellectual Property Systems	06 512 751	gberzon@yahoo.com	Ashmun/Gurley Streets, Monrovia; www.moci.gov.lr
Alberto Giani/ 22 July	CARE International	Project Manager-Urban/Peri-Urban Agriculture Project	06 136 546	alberto.giani@co.care.org	www.care.org
Patrick Okoth/ 22 July	Oxfam	Public Health Advisor	06 619 322; 077 315 162	pokoth@oxfam.org.uk	10th Street, Sinkor, Monrovia; www.oxfam.org.uk
Nyan Zikeh/	Oxfam	Public Health Officer			(As above)

22 July					
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Kerkulah Kollie/ James Dogba/ James Barclay/ 23 July	Tubman National Institute of Medical Arts (TNIMA)	School of Environmental Health- Director/ Instructors			Next to JFK Hospital, Sinkor
Dr. Gun Eriksson Skoog/ 23 July	Embassy of Sweden/ Swedish International Development Agency	Senior Programme Manager/ Acting Country Director	06 978 254	gun.eriksson.skoog@sida.se	Mamba Point, Monrovia

Annex 2

Report of Stakeholder Consultative Meeting
Needs assessment and strengthening of
Liberia's Sanitary and Phytosanitary (SPS) system

Those present:
Frederick Norkeh, MOCI
Dargbe Nimley, MPEA
Eric Cooper, MOA
Janniedel Haider, IF-NIU
Fong Zuagele, IF-NIU
Amin Modad, IF-NIU
Wounpay Doe, MOF (Customs)
Decountee King Sakie, MOF (Customs)
Clara Mvogo, UNIDO
Stephen Mambu, National consultant for SPS project
Sei Ghan, MOCI
Earl Neblett, EPA
Langley Kialain, Liberia Chamber of Commerce
Londa Vanderwal, international consultant

Introduction
A stakeholders' meeting was held on 9th July 2010 at 10:00 am at the conference room of the Integrated Framework National Implementation Unit (IF-NIU) of the Ministry of Commerce and Industry, Crown Hill, Monrovia, Liberia.
The meeting brought together government ministries and agencies including the Ministries of commerce, agriculture, planning, finance (customs), the Environmental Protection Agency, and the Chamber of Commerce. The meeting was facilitated by the national coordinator of the IF, Amin Modad.

MEETING OPENING
Amin Modad formally welcomed everyone and said that the purpose of the meeting was to acquaint stakeholders with the visit of a WTO Consultant to Liberia, who is contracted to conduct an SPS (food safety, animal and plant health) assessment. He declared that this was necessary in order to ensure cooperation for a successful assessment, as well as the development of a project proposal to help strengthen Liberia's SPS system.
Clara MVOGO, UNIDO national technical coordinator for the West Africa Quality Program, briefed the meeting with background information on the WTO SPS assessment. She informed the participants that the SPS assessment exercise is a result of a proposal forwarded by the Liberian Government to the WTO Standards and Trade Development Facility (STDF) requesting for a project preparation grant to facilitate a survey of the country's SPS framework (export and import) and to develop a project to strengthen the system.
Londa Vanderwal, WTO international consultant, in her introductory remarks intimated the meeting with the terms of reference of her contract. She noted that the need to develop Liberia's SPS capacity was contained in a report which stressed that the food safety is increasingly becoming a food chain issue. She indicated that the specifics of her contract are twofold: 1. To assist the government in

evaluating the SPS situation through application of a bio-security capacity evaluation tool developed by FAO, and
2. Draft a project proposal to address priority SPS needs and challenges in the country. She further said that the assessment will be carried out in the areas of food safety, animal and plant health, which are the areas covered by the SPS Agreement. She also said that her similar work experience with the FAO in Malawi and Gambia cause her to be optimistic that the assessment would bring the anticipated support for strengthening Liberia's SPS system. She introduced her national consultant, Mr. Stephen Mambu and solicited the cooperation of the stakeholders to assist in the ongoing assessment.

Brainstorming (Suggestion and Viewpoints of those present).
In the opening of this session, Mrs. Mvogo urged representatives to present a true and accurate picture of the national situation, which is the only way to develop a project to best strengthen the system.
The following points were highlighted:

- Most government ministries have standards that are either outdated, contain requirements that cannot be tested in country, or without legislative backing.

- The legal framework does not provide adequate coverage of SPS-related issues; even those in existence are either obsolete and/or limited in definition and application.

- There are a lot of duplications of functions: Many ministries are doing the same things, especially in the area of inspections. The weaknesses of the system allow markets to be flooded with substandard goods since the capacity to affect a more comprehensive system of control is lacking.

- The inspection and verification procedures that are in existence are not relevant to the present time. The issue of BIVAC's role was raised, especially with complaints of inadequate inspection and testing services conducted to ascertain that imports confirm to standards (pre-shipment and destination inspection).

Suggestions

- A strengthened SPS system is highly needed by Liberia considering the immense benefits to allowing Liberia to meet export requirements of lucrative markets, and also to improve the safety and quality of food and agricultural imports into the country. Activities of the various line ministries must be better coordinated in SPS standards-related activities.

- The legal aspect of the SPS system should be given attention, including any standards under development, necessary revisions to legislation, and any temporary measures needed.

- The engagement of legislators was also called for: they must be educated, sensitized and their support solicited for the passage of the required SPS bills. A first step in this area would be to engage legal experts to assist in the necessary revisions and development of legislation.

- The importance of enforcement of legislation and standards was also emphasized. Repercussions for the violation of legislation should be enshrined within the legal framework.

- The importance of public awareness raising and publicity of SPS-related issues was also noted.
- Lengthy discussions were held on the number and specialization of laboratories in this area. It was noted that the proliferation of labs with overlapping functions was not efficient, considering the limited human and financial resources available.
- It was noted that building an SPS system demands a holistic approach, ensuring that all relevant stakeholders are included, to ensure that all viewpoints are represented.

CONCLUSION

- With these suggestions put forward, the international consultant informed participants that she would like to meet with each agency, including all relevant staff and visiting all relevant locations as part of the assessment.

Annex 3

List of general questions asked to public sector stakeholders

In the area of an integrated approach to food safety, animal and plant health (biosecurity)

- Do you have any official policies, legislation and/or standards related to food safety, animal health and/or plant health? What is their scope? In what year were they enacted?

- How is your institution organized?
    - i.e. which divisions have biosecurity-related functions? How many people work in biosecurity-related areas? Who do those divisions report to? What training is available for your staff?

- Is your country a part of the relevant international organization (such as OIE, IPPC, Codex)? Have any activities been carried out in your country by those organizations (such as a PVS by OIE)? Do you have any national committees or similar structures working in this area (such as a Codex committee or SPS committee), and how are those committees structured?

- How do you communicate/ work with other national agencies working in biosecurity-related areas? How do you communicate/ work with other biosecurity-related agencies at a regional and international level?

- In each of the following areas, does your organization have any legal responsibilities or carry out any activities (in food safety, animal health or plant protection). What are your strengths and weaknesses in each of these areas?
    - Inspection
    - Quarantine
    - Certification/ verification
    - Enforcement
    - Diagnostic services/ laboratories

- Are there any facilities available to assist producers/ processers in your field? (i.e. fishing boat landing facilities, chilled storage, ice plants, government slaughterhouses, etc)

- What do you think are the biggest risks/ threats to food safety/ animal health/ plant protection (as appropriate)?