

2014 ANNUAL REPORT



MINISTRY OF AGRICULTURE REPUBLIC OF LIBERIA



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ABBREVIATION AND ACRONYMS

Acronyms	Interpretations
ACC	Agriculture Coordination Committee
ACF	Action Contre la Faim
AfDB	African Development Bank
AFT	Agenda for Transformation
AIDP	Agriculture Infrastructure Development Program
APL	Adaptable Program Loan
AfricaRice	AfricaRice
ASRP	Agriculture Sector Rehabilitation Project
ATWG	Agriculture Technical Working Group
BNF	Bureau of National Fisheries
BWI	Booker Washington Institute
CAADP	Comprehensive African Agriculture Development Program
CCAAP	Climate Change Adaptation Agriculture Project
CAC	County Agriculture Coordinator
CARGS	Competitive Agriculture Research Grant Scheme
CARI	Central Agriculture Research Institute
CBL	Central Bank of Liberia
CBOs	Community-Based Organizations
CDA	Cooperative Development Agency
CNS	National Centers of Specialization
CORAF/WECARD	West and Central African Council for Agricultural Research and Development
CMO	Co-Management Association
CNS	National Centers of Specialization
DAO	District Agriculture Officer
DRDRE	Department of Regional Development, Research & Extension
DTS	Department of Technical Services
ECOWAS	Economic Community of West African States
EOI	Expression of Interest
EPA	Environmental Protection Agency
EPO	Equatorial Palm Oil
EU	European Union
ESRP	Economic Stabilization and Recovery Plan
EVD	Ebola Virus Disease
FAO	Food and Agriculture Organization
FBOs	Farmer Based Organization
FED	Food Enterprise Development
FFS	Farmer Field School
FPIC	Free, Prior Informed and Consent
FUN	Farmer Union Network of Liberia
GAFSTF	Global Agriculture and Food Support Trust Fund

Acronyms

GDP
GEF
GEM
GIS
GOL
GPS
GSA
GVL
Ha
ICIPE
ICT
ICCO
IFAD
IFMIS
IITA
IUU
Km
LAADCO
LASIP
LiMA
LISGIS
LOA
MARCo
M&E
MOA
MOFDM
MOH
MOJ
MOU
MRU
Mt
NAPA
NGOs
NIC
NL
PAN
PCU
PFMA
PMU
PPCA
PPCC
PSC
PSIP
SAPEC

Interpretations

Gross Domestic Product
Global Environmental Fund
Governance Economic Management
Geographic Information System
Government of Liberia
Geo-Positioning System
General Services Agency
Golden Veroleum Liberia Oil Palm Concession
Hectare
International Center for Insect Physiology and Ecology
Information and Communication Technology
International Cocoa and Coffee Organization
International Fund for Agriculture Development
Integrated Financial Management System
International Institute for Tropical Agriculture
Illegal Unregulated and Unreported Fishing
Kilometer
Liberia Agriculture and Asset Development
Liberia Agriculture Sector Investment Program
Liberia Maritime Authority
Liberia Statistics and Geo-Information Services
Letter of Agreement
Morris American Rubber Company
Monitoring and Evaluation
Ministry of Agriculture
Ministry of Finance and Development Planning
Ministry of Health
Ministry of Justice
Memorandum of Understanding
Mano River Union
Metric ton
National Adaptation Program Action
Non-Governmental Organization
National Investment Commission
Nerica Lowland Rice
Personnel Action Notices
Project Coordinating Unit
Public Financial Management Act
Program Management Unit
Public Procurement and Concession Act
Public Procurement and Concession Commission
Project Steering Committee
Public Sector Investment Project
Smallholder Agriculture Productivity Enhancement and Commercialization

Acronyms

SOCODEVI
SRI
SSC
STRCSP
TCP
TOR
TURF
UN
USAID
UL
TU
WAAPP
WARFP
WFP
WB/IDA

Interpretations

Société de Coopération pour le Développement Internationale
Sustainable Rice Intensification
South-South Cooperation
Smallholder Tree Crop Revitalization Support Project
Technical Cooperation Program
Terms of Reference
Territorial Use Rights in Fisheries
United Nations
United States Agency for International Development
University of Liberia
W. V. S. Tubman University in Maryland
West African Agricultural Productivity Program
West African Regional Fisheries Project
World Food Program
World Bank/International Development Association Credit Facility

FOREWORD

I am delighted to present, on behalf of the Ministry of Agriculture (MOA), the 2014 Annual Report that highlights the major achievements in support of the Agenda for Transformation of the Government of Liberia to develop the agriculture sector.

Since 2006, the Government of Liberia has positioned the agriculture sector as the key driver in the revitalization of the economy. Placing such top priority on agriculture makes good economic, political and moral sense. Agricultural development is essential for economic growth, poverty reduction, employment creation, and income generation. Improvement in the agriculture sector is also fundamental to the attainment of food security and nutrition, and rural development, in a low-income developing country as ours. MOA recognizes increases in agriculture productivity as an effective driver of economic growth and poverty reduction in the agricultural sector. For these reasons, it is factored in our operations at all levels, in spite of limited resources--both human and capital. Productivity increases in agriculture is currently slow but gradually growing in response to the rebuilding and development of good rural infrastructure, appropriate institutions, access to technology, and well-functioning domestic markets on which it depends.

The Ebola Virus Disease (EVD) outbreak in Liberia posed huge social, economic and political challenges on the country's development pathway, especially in the development pathway of the agriculture sector. The rural farming population was greatly affected in communities where the Ebola epidemic was most prevalent. Agricultural extension workers were forced to leave the fields, creating a serious challenge on agricultural productivity. Hunger was prevalent during the Ebola outbreak and resulted to farmers consuming seeds they had in storage. This created a huge gap in seed availability for farmers for the next planting season. In an effort to prevent a drastic decline in the achievements in strengthening the capacity of smallholder farmers, the MOA developed six (6) Quick Impact Projects, some of these supported the provision of certified seeds (rice, corn and cowpea) to farmers for planting. These seeds have not yet been ordered. We will have to rush to get these seeds into the hands of farmers before the heavy rains comes.

Pursuant to our mandate the Ministry supported the development of policy and strategy documents and guidelines to facilitate the work that must be carried out for development of key agricultural sub-sectors. These include the National Fisheries and Aquaculture Policy; the draft act for the transformation of the Liberia Produce Marketing Corporation (LPMC) to the Liberia Agriculture Commodity Regulatory Authority (LACRA); and the alignment of Liberia's Sanitary and Phytosanitary Regulations with the World Trade Organization's Sanitary and Phytosanitary Standard (WTO-SPS) in support of Liberia's accession to the WTO. During the reporting period, an Act to establish Central Agricultural Research Institute (CARI) as an autonomous public agriculture research institute was passed by the National Legislature.

Agriculture research remains indispensable for the revitalization and future of food and agriculture in Liberia. During the reporting period, a ten-year agriculture Research Strategic Master Plan was developed for CARI. The Strategic Master Plan is aimed at providing a framework for the revitalization of the agriculture sector by the National Research Institute. It therefore clearly sets the direction, new organization structure, research priorities and time frame for research, capacity development, and related activities.

Presently, CARI's human resource capacity is gradually improving with the return of many of the young scientists who have been supported to pursue advanced training at various universities around the world. At the specialist levels, there are 14 scientists including 2 Ph.D. holders and 12 M.Sc. holders engaged in strategic research. Amidst these great accomplishments at CARI, a major setback was experienced in December 2014 when wild fire destroyed 20 of the 45 hectares of MOA/CARI seed beds which were established for generating elite cassava planting materials for on-ward distribution to 2,000 cassava farmers in 2015. Concerted efforts are being made to rapidly replant the burnt out areas.

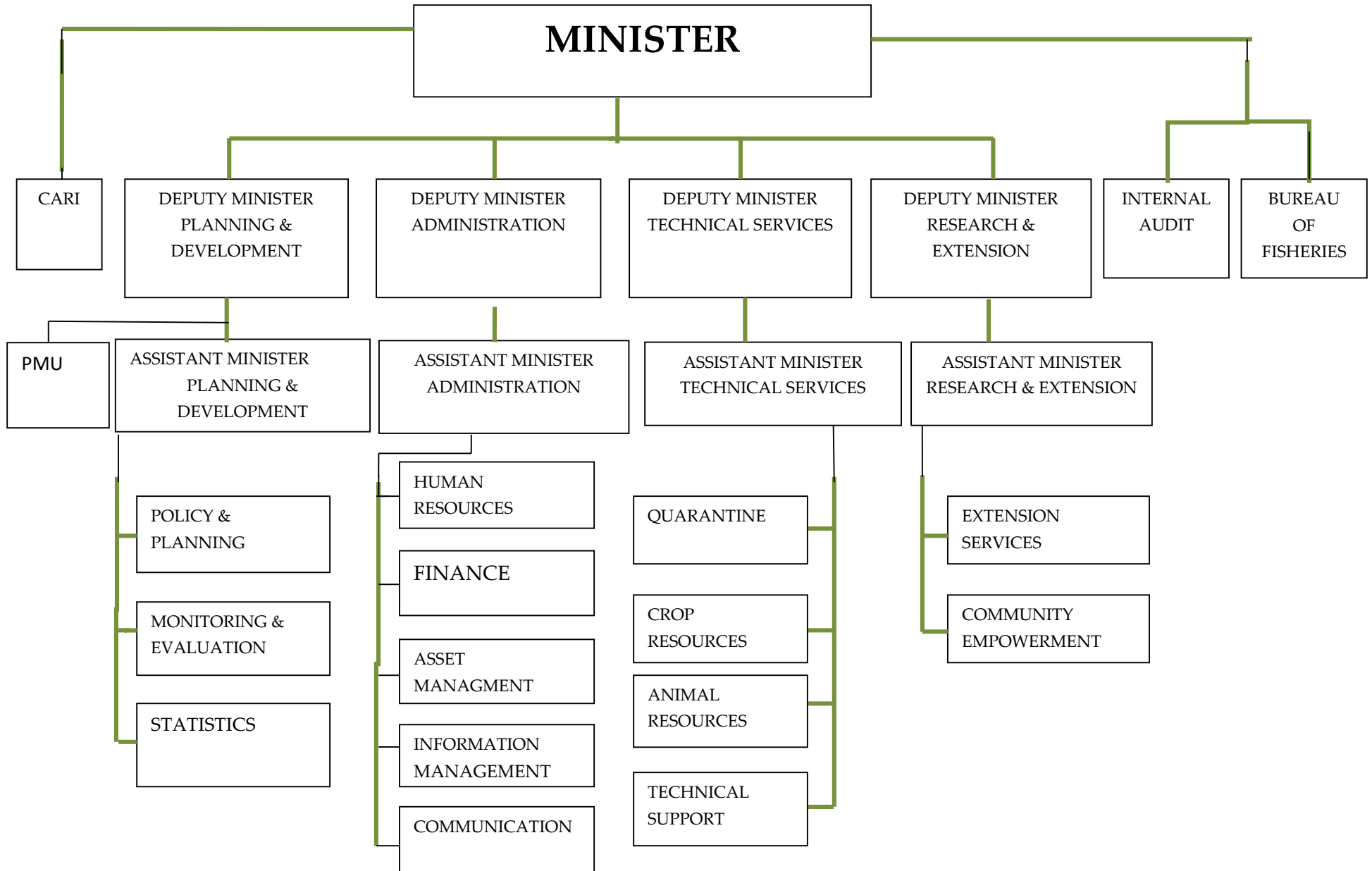
I am also pleased to report on MOA's achievement in its flagship program – “Capacity Enhancement and Job Creation”. During the year under review, under the MOA/SAPEC Project forty (40) undergraduate students were awarded scholarship support to study at Agriculture Colleges at the University of Liberia and Cuttington University. With its yearly scholarship, the MOA/Golden Veroleum Liberia (GVL) supported 179 students at Tubman University (TU), Cuttington University (CU), United Methodist University College and Booker Washington Institute (BWI). An additional twenty (20) scholarships were awarded to young Liberians to pursue advanced agricultural training programs at other African Universities. As a result of the Ebola Virus Disease travel ban imposed in some of countries, only sixteen (16) of these twenty (20) scholarship recipients left Liberia to commenced their studies. The remaining four (4) students are expected to commence studies by next academic year, 2015. With support from the USAID, two MOA staff were awarded M.Sc. scholarships to pursue advance training in Aquaculture at the Auburn University, U.S.A.

After two years of its implementation, the South-South Cooperation (SSC) Program was successfully completed. This technical assistance (TA) program, coordinated through the UN System, began in June, 2012 and ended in 2014. The program was a tripartite arrangement with the Government of Liberia (GOL) as implementing partner; the Government of the People's Republic of China (PROC) as sponsor; and the United Nations, through the FAO; to deliver Technical Assistance in Liberia. Under this skill- transfer/capacity-enhancement program, a team of Chinese farmers comprising five (5) experts and nineteen (19) technicians were matched with thirty-eight (38) young Liberians. The Chinese SSC Team introduced and transferred 92 appropriate technologies; introduced 33 new varieties of crops; carried out 24 plot demonstrations; developed training manuals; and conducted 743 practical and theoretical training sessions. The 1,547 beneficiaries of these trainings included farmers and technicians. Apart from from the thirty-eight (38) young Liberian counterparts assigned with the SSC Program as “Extension-staff-in-training”, an additional twenty-four (24) youths with B.Sc. and AA degrees from local institutions, were also hired for two years with renewable one year contracts. These youths were assigned to field-level services at six (6) MOA County Offices; the Arjay Farm in Montserrado County, and the World Food Program's (WFP) Purchase for Progress (P4P) Program that engaged various women farmer-based organizations in Bong, Lofa and Nimba Counties.

As we conclude another year, we express our thanks to our Government, development partners and stakeholders for their strong support and commitment to the agriculture sector, especially in the wake of the devastating Ebola Virus Disease crisis.

Dr. Florence A. Chenoweth
Minister of Agriculture

ORGANIZATION CHART



EXECUTIVE SUMMARY

The Ministry of Agriculture (MOA) is responsible for the formulation, development and implementation of policies, plans, programs and projects to enhance sustainable agriculture. The Ministry sets standards, rules and regulations governing the establishment, licensing and accreditation of individuals, public, private agencies and commercial organizations, in order to safeguard sustainable development of the agriculture sector.

The MOA recognizes that enhancing the level of performance around its main functions is crucial to the efficient management of the support service(s) delivery in the field. The Ministry therefore provides assistance to smallholder farmers, formulates policies for commercial farming and plantations, and manages food quality, in the best interest of the people of Liberia. Additionally, it also ensures that its staffs are well trained to adopt a more client-oriented service to smallholder farmers in the rural sector. Coordination of the various functions of the Ministry, including effective decision-making, technical expertise, performance-monitoring and problem-solving are realized from the work of the following four (4) Departments: Administration, Planning and Development, Regional Development and Extension, and Technical Services.

Functional Audit has been performed and proper procedures taken on many fronts in developing policies, strategies and programs in pursuance of the Ministry's overall mandates. Achieving these mandates will provide a springboard for progressively transitioning from subsistence farming to commercial farming. This transition will result in farmers benefitting from increased productivity, income, and generally improved livelihood.

During the year under review the Ministry, in keeping with its mandates, performed relevant activities that resulted to the following achievements despite the some major constraints encountered especially outbreak of the deadly Ebola Virus Disease (EVD) in March, 2014.

The Ebola menace has had serious and numerous negative impacts on economic and commercial activities in the region. Agriculture was one of the sectors of the economy that was heavily affected by the Ebola Virus Disease. Result from an earlier preliminary report by the MFDP at the onset of the Ebola epidemic indicated a revision of real GDP growth from a projection of 5.9 percent to 2.5 percent for 2014 with the mining, agriculture, and services sectors bearing the greatest brunt of the crisis. However, subsequent assessment conducted indicates that the economy declined by about 4.9 percent, and growth for 2014 was projected at just about 1 percent. Growth in agriculture and fisheries, which provide the largest share of employment in the economy, was revised downward from its previously estimated growth rate of 3.5 percent to 0.8 percent due mainly to decline in rubber and food crop production.

The MOA and key players in the sector developed measures to respond to the EVD and mitigate its impacts on farming communities. These measures were consistent with the Economic Stabilization and Recovery Plan (ESRP) developed by the MFDP. Under the ESRP, the sector's interventions were developed into immediate to short term interventions and medium to long term interventions. Under the medium to short term interventions, the sector developed the following six (6) Quick Impact Projects, comprising:

- Certified Seed Rice Purchase and Multiplication,

- Corn Production for Food and Feed,
- Multiplication of Cassava Planting Materials and Value Addition Development
- Support to Cowpea Production,
- Peri-Urban Community Garden Project, and
- Multiplication Centers for Piggery.

Under the medium to long term interventions, the MOA is cognizant of accelerating the implementation of the AfT and has proposed the following interventions consistent with the AfT:

- Large and small ruminant development (Muturu cattle breeding and rapid multiplication of sheep and goats);
- Support to the food crop value chains, especially vegetable with focus on food security and the export markets;
- Promote the adoption and up-scaling of agro-mechanization in Liberia Agriculture (land preparation, production and processing);
- Development of aquaculture to meet local fish demand and promote value addition and trade opportunities;
- Strengthening on-going capacity in research discipline and infrastructure development to be on par with research capacities on the 21st century; and
- Strengthen public-private partnership (PPP) arrangements in tree crops production and processing to increase export earnings.

Strengthening Human Resource Capacity

Two MOA Gender & Social Development staff were recipients of the 2014 African Women in Agriculture Research and Development (AWARD) Fellowship. Under the MOA/SAPEC Program, twenty (20) Master's degree Candidates (45% female) were provided scholarships for advance training in various fields of agriculture. Due to the imposed Ebola travel ban, only sixteen (16) who received placements travelled and commenced their studies at six (6) foreign universities in Ghana, Uganda, Tanzania and Kenya. The remaining four (4) recipients of the MOA/SAPEC scholarship will depart Liberia for their studies in 2015 when travel conditions have improved.

Two MOA staff were also provided scholarships from the USAID to pursue advanced training in aquaculture at the Auburn University, U.S.A. At the local level, the MOA/SAPEC Project awarded forty (40) Bachelor's Degree Candidates (30% female) scholarships at the Agriculture Colleges of the University of Liberia and Cuttington University. During the reporting period, an additional one hundred seventy-nine (179) agriculture students attending the William V. S. Tubman University, Cuttington University and United Methodist University College, and the Booker Washington Institute benefited from the MOA/ Golden Veroleum Liberia (GVL) Oil Palm Company annual scholarship.

Food and Nutrition Security Situation Assessed and Monitored Nationwide

In collaboration with key partners, Action Contre la' Faim (ACF), Concern Aid International, FAO-Liberia, Food Security Cluster, LISGIS, Mercy Corps, UNDP, WFP, and WeltHungerHilfe, the Food Security and Nutrition Unit (FSNU) conducted a rapid needs assessment on

the impact of Ebola Virus Disease on food security, livelihood, market, and agriculture. A database for food security and nutrition was established during the year under review. This database is expected to be utilized in the provision of briefs and updates that will support the formulation of plans and policies. Furthermore, an international consultant was recruited to lead the review and revision process of the National Food Security and Nutrition Strategy. In an effort to improve networking and advocacy on food and nutrition security, the Unit has continued to liaise with various food security stakeholders to ensure that food security concerns are mainstreamed in sub-sectoral plans as well as programs.

Accelerating Private Sector Participation in the Agriculture Sector

Among the current initiatives to promote private intervention in the agriculture sector in Liberia, the MOA has outsourced components of its projects to private companies/firms along the value chain. MOA still actively provides support for the revitalization of seven (7) Cooperatives in Cocoa/Coffee in Lofa County and the Dube Multi-Purpose Farmers' Cooperative in Konobo District, Grand Gedeh.

During the current reporting period, a total of 241.4 mt of cocoa was sold by the supported cooperatives in Lofa to a private sector, LAADCO. The MOA is closely working with MARCO and EPO-LIBINCO concessionaires for the implementation of various aspects of its tree crop projects through out-growers' schemes for smallholders rubber and oil palm tree crop farmers.

Support for the Revitalization of the Smallholders Tree Crops

The Ministry through its Smallholder Tree Crop Revitalization Support Project (STCRSP IFAD) rehabilitated an additional 4,800 ha of cocoa and coffee farms, bringing the total rehabilitated farm size to 6,300 ha since 2013. The MOA established 168 cocoa/coffee cluster nurseries and distributed 644,950 cocoa seedlings to 7 cooperatives in Lofa County. Approximately 50,000 additional coffee seedlings are expected to be distributed by the MOA for re-filling of the rehabilitated coffee farms.

Construction works have begun for the construction of 60.2 km farm-to-market road within the cocoa/coffee producing Districts in Lofa County. The road construction is about 75% complete. An additional 83 km of farm-to-market road has been assessed for rehabilitation. To ensure the continuous maintenance of these rehabilitated roads, beneficiaries' communities have been sensitized and mobilized, and 20 communities Road Maintenance Teams have been established. Other support by the MOA includes the rehabilitation of three (3) central warehouses and construction of 15 mini warehouses for cooperatives engaged in cocoa and coffee production in Lofa County.

In addition to MOA STCRSP (IDA funded), the Ministry of Agriculture is implementing, along with the private sector and civil society organizations, on pilot basis to test technologies for cocoa/coffee, oil palm and rubber rehabilitation in six counties Montserrado, Margibi, Grand Bassa, Bong, Nimba, and Grand Gedeh. In Bong, Nimba, and Grand Gedeh, the STCRSP (WB funded) is providing support for rehabilitating, replanting and extension of 7,500 ha cocoa/coffee farms in these Counties. An initial 2021 ha cocoa/coffee farms and 1,428 farmers from 61 communities (9 in Bong, 34 in Nimba and 18 in Grand Gedeh) have been identified.

Free, Prior, Informed, Consent (FPCI) to deed the Dube Oil Palm plantation in Konobo District, Grand Gedeh County to the Dube Multi-Purpose Farmers' Cooperatives was successfully conducted by the Land Commission (LC) with support from and in close collaboration with the MOA. MARCO will work with MoA to support 150 smallholder rubber farmers and 300 ha while initial site and farmers' identification for the Oil Palm Out-grower Scheme around the EPO-LIBNCO in Grand Bassa County was conducted.

Agriculture Infrastructural Development

In an effort to promote lowland rice production, the Ministry is providing support for development of lowland/swamps and water management infrastructure across the country. The MOA has conducted detailed technical studies for the development of 7,000 ha of lowland in preparation for future investment in irrigated rice farming in the South-Eastern Counties. Phase one (1) of this study was completed with 4000 ha reached /covered and plans are underway for the commencement of Phase 2.

The MOA/ASRP-AfDB Project has carried out rehabilitation works on 191.54 ha out of the estimated 314 ha of existing swampland areas in Grand Gedeh, River Gee, Maryland, Grand Kru Counties, and at CARI in Bong County. Additionally, the Ministry constructed 82 out of the 116 culverts along farm-to-market roads identified and designed for rehabilitation in four (4) of the South-Eastern Counties. Rehabilitation works on the 27 km Zwedru-Ziah Town Road is 95% completed.

With support from the Joint Japan-Liberia Food Aid Program, plans have been finalized and construction works have begun for five (5) new warehouses (modernized for climate change factors and postharvest losses due to pest intrusion):

- 1 in Sanoyee, Bong;
- 1 in Sacleypea, Nimba;
- 1 in Zwedru; Grand Gedeh;
- 2 in Lofa (Foya and Voinjama).

The MOA through its AIDP Project developed 71.5 ha of lowland for rice production in three (3) counties as follows:

- 27.5 ha in Gbarpolu
- 40 ha in Bomi and
- 4 ha in Grand Kru

Eight (8) Community Grain Reserves (CGRs) were built and equipped with rice milling machines, rice parboiling tanks and drying slabs for post-harvest processing and storage for 1,424 women beneficiaries in the following counties:

- Bomi (356),
- Gbarpolu (534) and
- Grand Kru (534)

An initial 154.7 mt of paddy rice was provided for the establishment of grain banks from which members can borrow paddy rice and repay at harvesting period.

Safeguarding Natural Resources

During the long years of civil unrest, Liberia was deprived of its much-needed revenue from the Country's vast marine coastal belt due to illegal fishing. These disturbances also destroyed the Country's marine stock. To reverse this trend, the Government, in partnership with the EU, invested over US\$12million to strengthen the capacity of the Bureau of National Fisheries. A modern surveillance system was set up to monitor and report all illegal fishing activities in Liberia's coastal waters. A multi-Agency Task Force was also established to deal with Illegal Unregulated Unreported (IUU). The Task Force includes MOJ (Coast Guard & Immigration), MOA, NPA, and BMA. As a result of these interventions the following achievements were made during the period under review:

- The Ministry generated L\$1,726,900.00 from the registration and licensing of canoes, and US\$1,925.00 from registration and fine of recreational boats.
- Presently in Liberia, local fishing vessels and foreign fishing companies can be arrested and fined for Illegal Unregulated Unreported (IUU) fishing activities in the Liberian waters. Additional contribution to government revenue by the Ministry amounted to US\$46,462.84 from the issuance of import for 22,581.39 tons of fish; approximately L\$14,659.00 and US\$780.50 from the issuance of export permits for 50 tons of dry fish and fish guts. The amount of US\$6,500 and L\$2,500 was generated in revenue through the issuance of phytosanitary certificates.

1.0 INTRODUCTION

1.1 Background

The Ministry of Agriculture of the Republic of Liberia is responsible for the development of the agriculture sector. It does so by ensuring that an effective organizational structure is put in place and is manned by staff capable of planning, coordinating, implementing, monitoring and evaluating agricultural development programs periodically. It also ensures that its staff and the farmers are trained to cope with the challenges of the agricultural activities.

Additionally, the Ministry ensures that the agricultural problems that impede production are investigated and lasting solutions found. The Ministry also ensures that farmers are provided with supportive services and the enabling environment to produce. The Ministry's core areas of responsibility will continue to consist of: agriculture, both smallholder and commercial; plantation crops; fisheries and livestock. The Ministry's major activities are coordinated through the following four (4) departments: Administration, Planning and Development, Regional Development and Extension and Technical Services, each with units and divisions as shown in the Ministry's organizational chart on page (iv).

1.2 Our Vision, Mission and Operating Principles

1.2.1 Our Vision

We envisage a self-sufficient, self-reliant and sustainable agricultural sector by the year 2030.

1.2.2 Our Mission

We believe that a sustainable and decentralised agricultural system is keyed to poverty reduction. Our mission is to create an enabling environment for a more dynamic and vibrant agricultural sector to ensure sustainable food security and employment opportunities for all Liberians.

1.2.3 Our Operating Principles

Excellence and Professionalism

We shall strive to achieve the highest standards in our service delivery and shall actively explore opportunities to improve on those standards. We shall also ensure that performance management, as a service delivery culture, will be integrated into all our operations.

Commitment

We commit ourselves to be an effective agent of agricultural transformation and, therefore, will embrace a culture of customer service. The farmer, service providers and all our stakeholders will be central to our operations

Diligence and Courtesy

We shall be at our places of work during official hours of duty and shall diligently devote ourselves wholly to our work. We shall treat all of our valued clients and colleagues with courtesy.

Integrity

We shall uphold high moral integrity in the provision of our services. To this effect, we shall refrain from seeking, offering or accepting favors or inducements, financial or otherwise, in the course of discharging our duties. We shall not use public property or official time to fulfill private

needs; neither shall we use information acquired in the course of official duties to gain personal advantage.

Gender Equity

Taking cognizance of the key role of women in production and marketing of agricultural products, we shall endeavor to promote gender sensitive practices and culture within our staff and the wider agricultural stakeholders.

Partnership-Building

We will promote and embrace partnerships and participatory processes in policy formulation and implementation of our activities. Active participation of our stakeholders, especially the private sector and grassroots communities, will enhance ownership of programs and projects.

Accountability and Transparency

We shall be accountable and transparent to the Government and people we serve.

Efficiency and Responsiveness

We will serve our clientele in an efficient manner, ensuring that all requests are dealt with promptly.

1.3 Importance of the Agricultural Sector

Liberia faces overwhelming reconstruction and development challenges after a long period of civil and political instability. Sixty-four percent of its nearly 4.0 million people equally divided between males and females, are poor with a per capita gross domestic product (GDP) of about US\$132 in 2008 (World Bank). The economic outlook has shown some favorable signs since the end of hostility in 2005. Liberia experienced real growth rates of 7.8%, 9.4%, 7.1%, 4.6%, 5.1% and 5.9% in 2006, 2007, 2008, 2009, 2010 and 2011, respectively (International Monetary Fund, 2011:185). The agricultural sector continues to play a significant role in the Liberian economy, contributing close to 40% of GDP over the last five years.

The GOL encourages foreign investors interested in long-term large investment opportunities to consider the sector. Reflective of this is that the agricultural sector portfolio (excluding the large scale plantations) exceeds US\$200 million with government's support from its own sources now exceeding 2% of the total budget. In return, agriculture's contribution to GDP is over 50%.

With 2015 the year when the UN goal for its member nations to attain national food security around the corner, an estimated 36% of the nation's population is either food insecure or highly vulnerable to food insecurity. Food insecurity is spreading from the Southeast towards more central areas of the Country (Bomi and Cape Mount Counties).

2.0 MAJOR ACTIVITIES AND ACHIEVEMENTS OF THE DEPARTMENTS

2.1 Department of Administration

The Department of Administration is mandated to ensure proper management and coordination of administrative processes and procedures for the implementation of all agriculture programs and projects for the enhancement of food and nutrition security.

The distribution of farming inputs, coordination of training and purchasing of crops (mainly rice) continue to be challenged by poor road conditions. On the bright side, the availability of road-worthy vehicles has help to improve the transportation of these farm implements and the delivery of services to farmers. Agricultural machineries and equipment, planting materials, including vegetable seeds, paddy rice, seed rice and other agro supplies were transported to farmers throughout the fifteen (15) counties.

The execution of the Ministry's mandate to increase food and nutrition security and end hunger is largely dependent on qualified scientists, specialists and experts for its implementation and for the achievement of its objectives. To this end, the Ministry has instituted an aggressive training program to meet the training needs of the Ministry.

For proper accountability and transparency of financial resources entrusted to the Ministry, the Internal Audit Division has been supported and strengthened by additional auditors from the National Internal Audit Secretariat. This move will ensure compliance with relevant laws, manage the institution's risks, strengthen internal controls and improve financial management.

Internal Audit Division has, over this period, reviewed all financial documents and provided consulting services systematically. This procedure has improved the Ministry's risks management, governance, and control processes.

Activities of the Department were coordinated effectively and efficiently through the Divisions of Finance, Procurement, Asset Management, Human Resource, Communication and Internal Audit.

2.1.1 Finance Division

The Finance Division of the Ministry of Agriculture is responsible to ensure accurate and appropriate financial accounting and management of resources made available to the Ministry for effective execution of projects and programs. The Finance Division professionally coordinated and managed the Ministry's financial resources to ensure budget performance in accordance with GOL policies and procedures for improved service delivery to farmers.

2.1.1.1 Achievements of Finance Division

- Linked with the Ministry of Finance IFMIS system to input financial data for accurate accounting and budgetary control;
- Ensured proper accountability of cash flow, reflecting transparent inflow and outflow of funds received;
- Designed system control of budgetary allotments of each department;
- Developed improved methodology of recording and reporting

2.1.1.2 Budgetary Appropriation

The Ministry's budgetary appropriations for operational and project budgets were US\$6,036,757 and US\$500,000.00 as Project Budget for CARI. The core budget includes six Departments with appropriation as follows:

Table 2.1: Budgetary Allotment to MOA Departments

No.	Departments	2013/2014 Appropriation
1	Regional Development, Research and Extension	255,606
2	Technical Services	107,255
3	Planning and Development	44,220
4	CARI	409,709
5	Fisheries	43,919
6	Administration and Management	4,676,048
7	Project Budget/CARI	500,000
	Subtotal (Operation Budget)	6,036,757

Grand Total MOA budget

US\$6,036,757

Table 2.2: Core Budget Budget/PSIP Performance

Core Budget	Allotment Year to Date	Expenditure to Date	Balance in Allotment
Personnel	2,391,395	2,390,722	673
Goods and Services	1,776,641	1,759,102	17,539
Grant to International Organization	64,310	64,302	7
Capital Expenditure	84,249	84,290	4
Subtotal	4,316,639	4,298,416	US\$18,223

2.1.2 Procurement Division

The Procurement Unit within the Ministry of Agriculture prepares the Ministry's annual procurement plans, requests for proposals bidding documents and invitation to bid; conducts bid-opening procedures and ensures that procedures and processes are in compliance with the provision of the Public Procurement and Concessions Act (PPCA).

2.1.2.1 Major Achievements of Procurement Division

The Procurement Unit of the Ministry procured goods and services for fiscal year 2014 in the amount of US\$(1,759,102.52). Items procured included the following: petroleum products, solar system lighting, furniture and fixture, ICT equipment, tools and small equipment, agricultural inputs and supplies, agriculture equipment, telecommunication equipment, transport equipment, vehicle insurance, rice milling equipment, rehabilitation of office buildings and staff residence at CARI.

2.1.3 Internal Audit Unit

The Internal Audit Division of the Ministry of Agriculture comprises of resident auditors (MOA Staff) and auditors that are recruited, deployed and intermittently transferred by the Internal Audit Secretariat. Although they function as integral part of the Ministry, the Internal Auditors carry out independent financial assessments of the activities within the Ministry. In addition to the internal auditing, the Ministry is also audited by external auditors, who usually provide an annual opinion on the Ministry's financial transactions, usually on a quarterly or annual basis as required. Both groups of auditors play an important role in increasing government accountability and have mutual interests regarding the effectiveness of internal financial controls. The key Internal Audit Priority Areas include payroll systems, bank reconciliation, procurement controls, asset management systems, accounting and budgetary controls, pre-audit of disbursements, prior audit recommendations, processing time efficiency, and deliverable validation.

2.1.3.1 Responsibilities of the Internal Audit Unit

The Internal Audit Secretariat is inherent in Section 38 of the Public Financial Management (PFM) Act of 2009, which mandates the establishment of an Internal Audit Department for each public sector entity. The function of the Internal Audit Division is to ensure an effective and independent auditing that is not controlled by the entities that are the subject of internal auditing. It also incorporates internal audit results in the priority setting, planning and decision making processes at the various public sector entities. The Unit is to progressively build the capacity of internal audit functions in the various ministries and agencies, as the provision of financial management responsibilities is devolved to Ministries and Agencies. The Internal Audit Unit is headed by a Director who reports to the Minister of Agriculture.

An Internal Audit Committee is set up by the Ministry of Agriculture for the following purpose: Review and approve audit plans of the Internal Audit department; direct management to ensure that the Internal Audit division has sufficient resources to carry out its mandate pursuant to section 38 of the Public Financial Management Law of 2009 and regulations issued by the Ministry of Finance; direct officials/employees of the Ministry of Agriculture to implement the audit recommendations; Oversee the proper implementation of audit recommendations; Seek any information it requires from all officials and employees of the Ministry of Agriculture on matters pertaining to internal controls, financial reporting, audit, and legal compliance; Review all audit reports issued by the Internal Audit division and the Auditor General and consider the overall implications of the reports for the organization; and evaluate the performance of the Internal Auditors

2.1.3.2 Achievements of the Internal Audit Unit

- Conducted risk assessment which resulted in identification and documentation of risks associated with various units and divisions: Procurement, Finance, Personnel and Assets Management;
- Provided professional assistance in the preparation of ministry's financial and operational manual prepared by USAID GEMS;
- Assisted in the design and development of samples inventory stock cards, good receiving notes and ledger for the MOA main office warehouse;
- Collated and submitted copies of "GAC 76 internal control priorities" to the following units or divisions: Finance, Procurement, Asset Management and Personnel;

- Designed/developed and distributed verification checklists for processing local purchase orders and payment vouchers; and
- Conducted “On the Job Training” or mentoring for Internal Audit staff;

2.1.3.4 Constraints and Challenges of the Internal Audit Unit

- The Ebola virus disease outbreak impeded the operations of Internal Audit. Internal Auditors could not travel to other MOA's field offices to conduct risk assessments or audits.

2.1.4 Human Resource Division

The Human Resource Division is responsible to carry out recruitment, employment, replacement, dismissal, processing of pension documents, Personnel Action Notices (PANs), social security documents, group insurance, implementation and enforcement of Civil Service Agency (CSA) Standing Orders, as well as perform personnel advisory role.

2.1.4.1 Major Achievements of Human Resource Division

- Completed MOA Personnel Listing for 2014/2015;
- Ten (10) personnel names were placed on MOA Payroll for the months of February, May and June 2014;
- Deleted twenty four (24) employee names from MOA payroll which included nine (9) Presidential appointees, (7) resignations, four (4) deaths, two (2) dismissals for job abandonment and two (2) pensioners;
- Twenty-two (22) MOA employees received Civil Service Biometric Identification cards;
- Fifty-seven (57) Personnel Action Notices were submitted to the CSA for employment through direct replacement. Seven (7) of these were processed for salary adjustment for personnel who returned from studies, one (1) promotion, while the other one (1) for the Grand Cape Mount County Agriculture Coordinator name;
- Submitted forty eight (48) personnel names to CSA for pension. Two (2) of these names were transferred onto the pensioner’s payroll, and the balance forty-six (46) still in process;
- Two hundred and forty-eight (248) employees received annual leave from January 2013 to December 2014. In addition, prepared and submitted annual leave 2015 to Civil Service Agency;
- Processed medical refund for payment by Secure Risk Insurance Company in favor of four (4) MOA employees; and
- A total of 173 MOA employees received medical treatment from various clinics and hospitals under the Group Insurance covered by Secure Risk Insurance Company.

2.1.4.2 Recruitment/Employment

Recruited (10) personnel through direct replacement from savings realized from death, resignations and dismissal of employees:

- (3) President’s Young Professionals (PYP)
- One (1) Senior Agriculture Office
- One (1) Mail Clerk
- Five (5) non-contractors staff

Six (6) of the employees have taken up assignment in six (6) counties in line with the Ministry's decentralization which is ongoing. The counties are: Lofa, -Grand Gedeh, Montserrado, Maryland, Grand Cape Mount and Margibi Counties.

In collaboration with the Department of Regional Development Research and Extension and the Civil Service Agency, and PMU Projects (WAAPP, SAPEC, CCAAP and STCRSP) Coordinators, the following contractors were recruited for the above projects:

- One (1) Internal Auditor for WAAPP IC Liberia
- One (1) Agronomy and three (3) drivers for the Smallholder Tree Crop Rehabilitation Support Project (STCRSP/WB)
- One Administrative Officer for the Climate Change Adaptation Agriculture Project (CCAAP)
- One Irrigation & Rural Infrastructure Engineer

The Ministry has a total number of 882 personnel, including civil servants, contractual employees and staff serving in various capacities with the MOA projects.

Table 2.3: Core MOA staff Strength by Department

No.	Department	Male	Female	No. of Personnel
1	Administration	61	23	84
2	Planning and Development	12	3	15
3	Regional Development, Research and Extension	83	10	93
4	Technical Services	67	6	73
5	Bureau of National Fisheries	24	3	26
	Total Civil Servants	248	44	291

Table 2.4: Contractual Employees (Professional & Non-Professional)

No.	Type of Contractual Employees	Male	Female	Total
1	*Professional staff	4	4	8
2	Para Professional	6	3	9
3	Para Professional (physically challenge staff)	3	2	5
	Total contractual staffer 2014	13	9	22

Table 2.5: Total PMU Staff by Projects

No.	Project	Male	Female	Total
1	PMU management & Technical Advisory Team (AIDP/WB)	6	0	6
2	Agriculture Sector Rehabilitation Project (ASRP/AfDB)	15	5	20
3	Agriculture Sector Rehabilitation Project (ASRP/IFAD & Smallholder Tree Crop Revitalization Support Project (STCRSP/IFAD	19	2	21
4	West Africa Agricultural Productivity Program (WAAPP/WB)	16	3	19
5	Food Security and Nutrition (FS & N)	3	3	6
6	Smallholder Tree Crop Rehabilitation Support Project (STCRSP/WB)	8	2	10
7	Agriculture Infrastructure Development Project (AIDP)	1	0	1
8	Smallholder Agriculture Productivity Enhancement and Commercialization (SAPEC) Project	11	1	12
9	West Africa Regional Fisheries Project (WARFP)	24	2	26
10	Enhancing Resilience To Climate Change By Mainstreaming Adaption Concerns Into Agricultural Sector Development In Liberia (UNDP/GEM	10	0	10
	Total PMU workforce as at December 2014	113	11	124

Table 2.6: Summary of MOA Workforce December 2014

No.	Departments and projects personnel of MOA	No. of Personnel
1	MOA Workforce Civil Servants as at December 2014	291
2	Contractual Employees (Professional & Non-Professional)	22
3	Total PMU Staff by Projects	124
4	Central Agriculture Research Institute	445
	Total workforce of payroll staff and non-payroll staff currently at MOA	882

2.1.4.3 Training

2.1.4.3.1 Foreign Training

From January to December 2014, forty-seven (47) Liberian agricultural staff travelled to seven (7) countries to undergo training in the following areas of study: Agriculture Marketing, Rice Cultivation, Marine Fishery Management, Agricultural Mechanization, Veterinary Technology, Animal Disease, Prevention and Control, Agric-Biotech Application, Food Safety Testing Technology, Export Food Quality Inspection, Practical Technology Training Course on Small Agricultural Machinery Engineering, Molecular Biology and Biotechnology, Animal Nutrition, Soil Science, Agriculture Statistics, Agriculture and Education, Procurement and Logistics, Agriculture and Applied Economics, Gender and Development, Crop Science, Veterinary Medicine and Animal resources.

During the reporting, a total of thirty (30) staff of MOA returned from training in the following categories:

- Twenty-eight (28) staff returned with certificates
- Two (2) staff returned with Masters

Under the MOA on-going training program, a total of sixty-five (65) staff are still in training:

- a. Two (2) BScs.
- b. Sixty (60) Masters and
- c. Three (3) PhDs.

Some of these trainees are expected to complete their trainings and return in 2015-2017.

2.1.4.3.2 Local Training

To strengthen internal capacity for secretaries and delivery of services, the Ministry of Agriculture organized an in-service training entitled “Clerical Training, specifically, records management” for eight (8) of its staff members at the Central Office in September 27, 2013. The training was carried out by Mrs. Edith N. Ricks, Consultant/HR/Training/MOA.

2.1.5 Communications Division

The Communications Division of the MOA is responsible to capture, manage and disseminate agricultural information aimed at creating visibility of agriculture development in Liberia. Currently, the Division is coordinating the activities of all media related activities of the Ministry of Agriculture in close collaboration with the various MOA Departments and media institutions.

2.1.5.1 Achievements of Communications Division

- Developed key awareness messages on the MOA WAAPP project implementation activities, including television promos on the Project’s capacity building component that mainly highlighted the provision of 37 scholarships to young Liberian who are now pursuing masters and PhDs in East and West Africa Universities.
- Produced a drama in the Vai dialect about the MOA provision of seed rice to farmers and the benefits of lowland farming.
- Formulated and submitted a communication awareness plan to the Director of the Program Management Unit.
- Produced six radio programs and created video documentaries that presented an overview of the STCRSP project in Lofa
- Facilitated the MOA signing a Memorandum of Understanding with the Liberian Broadcasting System for the purpose of allocating air time to the MOA on its radio and television channels in order to promote and create visibility of all agricultural activities through the airing of Jingles, promos, dramas, documentaries, and special features. Currently, two major television stations, LNTV, and REAL T V are now airing the MOA’s promos, which can also be assessed on the “You tube” and “Facebook” social media.
- The Communication Division has embarked upon the production of a television program called “FACTs”. “FACTs” is a 30-minute program that will give detailed information on various aspects of programs and projects that are implemented by the MOA.
- The Head of the Communication Division represented the Ministry at several meetings, including the following:
 - A half day FOI stakeholder meeting organized by Carter Center, and
 - The Food Enterprise Development (FED) to serve as panelist to discuss “The role of MOA in strengthening Liberia’s agriculture sector, benefits, challenges, and opportunities – emphasis on the involvement of the media”
- ❖ The Communications Division issued several Press releases, which informed the public about MOA activities:

- ❖ The sudden outbreak of chicken sickness, and pest infestation, and its danger to food security in Bong and Montserrado Counties;
- ❖ President Sirleaf inspection of agricultural projects in Lofa County;
- ❖ Dedication of Poultry Hatchery and construction of Fish Landing Cluster in Cape Mount County;
- ❖ Farmers to benefit from selected farm mechanization services in all of the 15 counties, such as Tractors with all their implements, power tillers, threshers, winnowers and seeders; and
- ❖ Published several public service announcements, including advertisements for Expression of Interest (EoI) for the procurement of farming inputs and related services for small-holder farmers

Success Stories on Back to the Soil

Through the appearance of Mrs. Comfort Dolo on the MOA radio program, she became a recipient of a loan from an international organization (USAID/IBEX) to upgrade her backyard garden at the Voker Mission Community, Paynesville. Mrs. Dolo explained that she combined her back yard farming and entrepreneurial skills to build one of the most outstanding back yard gardens in her community. “Back to the Soil” encourages peri-urban community dwellers to become involved in improving their communities by growing vegetables in their backyards.

2.1.5.2 Challenges of Communications Division

- ❖ Inadequate remuneration (allowances) and benefits of Communication to motivate staff for improved assurance of service delivery;
- ❖ Inadequate budgetary allocation and logistical support;
- ❖ Lack of training in script writing and video editing for communications staff; and
- ❖ Insufficient office space for recording radio and television programs.

2.1.6 Asset Management Division

The Asset Department of the MOA has an oversight responsibility to maintain the assets of the Ministry of Agriculture under the direct supervision of the Deputy Minister for Administration.

2.1.7 Legal Division

The Legal Division is responsible to provide legal advice to the Ministry in contract negotiations, contract drafting, protect the interest of the Ministry, ensure compliance with statutory regulations, and liaise with the Ministry of Justice to provide competent legal representation on matters involving litigation.

2.1.7.1 Major Achievements of Legal Division

During the period under review, the Division achieved the following:

- Settled outstanding motor vehicle accident
- Liaised with Civil Service Agency to resolve employee concerns
- Settled outstanding default in construction projects
- Advised Ministry in employment negotiations and contract drafting
- Advised the Ministry in service negotiations and contract drafting
- Advised the Ministry on strategies to comply with the public procurement and concession statute

- Liaised with the Ministry of Justice to respond to litigation matters involving land disputes

2.2 Department of Planning and Development

The Department of Planning and Development is responsible for providing policy advice on agricultural economic issues and engaging in the strategic planning and sector coordination in order to promote and stimulate agriculture development. Its principal functions include providing guidance for planning and allied functions for the establishment and maintenance of proper direction for development purposes; developing priority programs for the enhancement of agriculture; monitoring and evaluating the performance of agricultural programs; and providing agricultural statistics for policy making. The department also coordinates the activities of various departments in the Ministry of Agriculture (MOA) and other stakeholder institutions engaged in agricultural programs; ensures that institutional support requirements are adequately considered in the planning process and develops information on the various support institutions.

As part of its planning functions, the Department assesses the alternative means of providing institutional support; monitors the performance of the institutional support system and develops policy recommendations relative to institutional and infrastructural support systems. Importantly, the Department ensures that all assistance from external sources is consistent with the development program of the MOA and is utilized for maximum contribution to the development of the sector and the country.

The Department has four (4) main Divisions, namely: Agriculture Sector Coordination, Food Security and Nutrition, Planning and Policy, and Monitoring and Evaluation. Due to the lack of adequate budgetary support, agricultural statistics is outsourced to LISGIS. Staffs from the division have been re-assigned to the Sectoral coordination, Food Security and Nutrition and Monitoring and Evaluation. The Department of Planning and Development also oversees the Project Management Unit (PMU) which was set up by the Ministry of Agriculture in 2010, as part of its on-going reform initiative to ensure effective and efficient management, and the implementation and coordination of donor-funded agricultural projects.

2.2.1 Agriculture Sector Coordination

Division of Agriculture Sector Coordination of the Department of Planning and Development is the catalyst between the Ministry of Agriculture and development partners operating in the agricultural sector. It coordinates agricultural development activities to insure that they are aligned with national development objectives. Coordination is done through the Agriculture Coordination committee (ACC). The ACC is a public-private body which meets monthly and provides the Ministry with advice for policy formulation to propel the sector to growth and development.

The Agriculture Coordination Committee is strongly supported by its various working groups established on subsector basis. Membership in each working group is based on technical knowledge of the subsector. The general mandate of all working groups is to do an in-depth analyses of the sector and development strategies based on good agricultural practices. The analyses help to increase productivity and improve the quality of agricultural commodities (especially export crops) and enable Liberia compete on regional and international markets for fair prices.

2.2.1.1 Achievements of Agriculture Sector Coordination

- Thirty-two (32) Non-governmental organizations were accredited to engage in various productive agricultural enterprises such as: rice, cassava, vegetable, inland fishery, small ruminant, pulses, legume, etc in 12 political subdivisions of the country; and
- Eight (8) Agriculture Coordination Committee (ACC) technical working groups were restructured as follows: Rice; Cocoa; Rubber; Cassava; Oil Palm; Urban & Peri-urban; Livestock and Fishery;

2.2.1.2 Constraints of Agriculture Sector Coordination

The Division of Agriculture Sector Coordination is however faced with some constraints in effectively coordinating the activities of development partners operating in the agriculture sector. These problems include inadequate number of staff to do field work and the lack of logistical support.

2.2.2 Monitoring and Evaluation Unit

The overall objective of the Monitoring and Evaluation (M &E) Unit is to improve the MOA service delivery system through the provision of adequate, accurate and timely information on the performance of the sector and MOA activities to enhance decision-making. The M & E Unit under the Department of Planning and Development demands that its planning, management, and monitoring be based on sound evidence and for which it is crucial to ensure that the level of support is sustained, available, comprehensive, and reliable with consistent up-to-date statistical data available.

2.2.2.1 Activities of Monitoring and Evaluation Unit

To ensure transparency, accountability and implementation of agriculture sector projects, the M&E Unit will work to monitor and evaluate those projects in accordance with Agenda for Transformation (AfT). The M & E function and statistics will help MOA to follow the results and evaluate programs, projects, and related work activities in the rural sector as well as to collect data for policy decisions and to give feedback to MOA management.

2.2.2.2 Achievements of Monitoring and Evaluation Unit

- Hired consultant services for the development of the M & E and MIS system for the Project Management Unit (PMU) and the Ministry of Agriculture;
- Sourced funding for the country need assessment for the eventual establishment of the Liberia SAKSS Node to report on the CAADP LASIP implementation;
- Established partnership with the USAID Food & Enterprise Development (FED) project for the collection of data in 6 of FED operations areas; and
- Procured equipment such as computers, phones, motorbike provided to the MOA

2.2.3 Division of Statistics

The Division of Statistics of the Ministry of Agriculture has the mandate to collect all agricultural data, especially the Annual Crop Survey (ACS) from the fifteen political counties and Secondary Data from government line ministries and other institutions in order to buttress government policies formation.

2.2.3.1 Activities of Division of Statistics

- Assist in construction of sampling frame, determine sample size and select samples;
- Prepare tabulation plan;
- Assist in designing survey manual and questionnaire;
- Prepare quality control guidelines and procedures for data collection;
- Coordinate the activities of data collection including yield test, early warning reports and farm area measurement;
- Assist with the analysis and evaluation of survey results;
- Supervise and manage secondary and time series data collection and present report; and
- Assist in conducting supervisors and enumerators training and perform others as may be required.

Presently, the division has been faced with budgetary challenges which prompted a Memorandum of Understanding between the Ministry of Agriculture and the Liberian Institute of Statistics and Geo-Information Services (LISGIS) in 2010, rendering its function to LISGIS. As a result, staffs of the division are assigned to other units (Agriculture Sector Coordination, Monitoring & Evaluation and Food Security) within the Department in order to provide technical backstopping.

2.2.4 Gender and Social Development Unit

The Gender and Social Development Unit in the Department of Planning & Development was established in January 2014 to assist in gender-sensitive participatory planning and support implementation; ensure women's issues appear in local plans; verify field reports to determine possible implications of implementation, and agree on corrective action with the appropriate decision makers.

2.2.4.1 Activities of Gender and Social Development Unit

- Assist in designing and implementing work plan/activities for the office, support project management and technical staff in incorporating gender issues in projects social development system;
- Liaise closely with senior management, departments, projects, staff, stakeholders and related government ministries/agencies and local government to exchange ideas on the gender-sensitive social development activities;
- Work with local and international organizations, local women's groups to identify how they do their own social development and how this can be linked to the ministry's social development plans that are safe and appropriate;
- Identify support and resources needed for institutional and capacity strengthening, provide follow-up to ensure the provision of support that will enable their active participation;
- Assist in gender-sensitive participatory planning and support implementation, ensure women's issues appear in local plans; verify field reports to determine possible implications of implementation and agree on corrective action with the appropriate decision makers.

2.2.4.2 Achievements of Gender and Social Development Unit

- Developed Gender Mainstreaming Strategy and validated the Action Plan to highlight gender issues into the Ministry's work plan;

- Conducted two (2) separate Leadership training workshops in Bomi and Bong counties for 100 persons from 6 counties (Bomi, Bong, Lofa, Gbarpolu, Margibi and Montserrado). The participants included rural women; farmers' youth group representatives, agricultural students, MOA local staff, local counties officials from the Ministries of Gender and Internal Affairs;
- Participated in the Africa-Rice Science week in Cotonou, Benin;
- Two Gender & Social Development personnel, Ms. Cheryl Williams and Mrs. Cleopatra Gibson Jallay were recipients of the African Women in Agriculture Research and Development (AWARD) Fellowship for 2014.

2.2.5 Food Security and Nutrition Unit

A Food Security and Nutrition Secretariat was set up and placed in the Ministry of Agriculture to spearhead the implementation of the strategy of the Joint Food Security and Nutrition Program. It was set up in 2008 for monitoring food security and nutrition situation in the country as well as coordinating food security related activities and programs. As part of its core function, the Unit is to monitor the food security and nutrition situations nationwide and coordinate food security and nutrition interventions/activities undertaken by the national government and its development partners.

In accordance with its 2014 work plan the key deliverables included:

- To review and revise the National Food Security and Nutrition Strategy (FSNS) with the aim of ensuring that current realities are reflected and it is aligned with sub-regional and regional food security and nutrition initiatives;
- To ensure that networking and advocacy on food security and nutrition is enhanced at all levels;
- To conduct periodic monitoring of market price enumerators, institutions (INGOs, LNGOs, CBOs, etc.) involved in food security and nutrition within the country; and
- To establish database for food security and nutrition data and provide briefs and updates to inform formulation of plans and policies.

The principal activities that contributed to the achievements of the Unit's planned activities include but not limited to organizing and supporting the food security and nutrition interagency meetings and providing leadership for the coordination of the national food security and nutrition monitoring system. The monitoring system is comprised of:

- Bi-weekly consumer market price survey of staple commodities;
- Household food security and nutrition surveillance;
- Comprehensive food security and nutrition survey; and
- Monitoring of food security and nutrition related projects and programs.

2.2.5.1 Achievements of Food Security and Nutrition Unit

- Recruited an international consultant to lead the review and revision process of the National Food Security and Nutrition Strategy. A first draft report was produced but process was interrupted by the outbreak of the Ebola Virus Disease;
- Established database for food security and nutrition data and provided briefs and updates to inform formulation of plans and policies;

- Ebola response Situation Room set-up to monitor the impact of Ebola on agriculture and food security through telephone interviews with key informants including the County Agriculture Coordinators (CACs);
- Conducted a rapid Needs assessment on the impact of Ebola on food security, livelihoods, markets and agriculture. Major contributing partners were: Action Contre la' Faim (ACF), Concern Aid International, FAO-Liberia, Food Security Cluster, LISGIS, Mercy Corps, UNDP, WFP, and WeltHungerHilfe. At the field level, key informants who contributed to the exercise included: agriculture associations, County Agriculture Coordinators (CACs), community leaders, District Agriculture Officers (DAOs), Environmental Protection Agency (EPA), Food Security NGOs, Forestry Development Authority (FDA), local administrations, local Ebola task force, micro-finance institutions, producers groups, rural women structures.

2.2.5.2 Major Challenges of Food Security and Nutrition Unit

- Inadequate budgetary allocation and logistical support;
- Insufficient office space for the setting up of the Mano River Food Security Hub equipment and the establishment of the food security database system;
- Limited human resource capacity in data analysis and report writing;
- Limited technical staff to enhance field activities including assessments and monitoring.

2.2.6 Program Management Unit

The Department of Planning and Development also oversees the Program Management Unit (PMU) which was set up in the Ministry of Agriculture in 2010 as part of its on-going reform initiative to ensure effective and efficient management, implementation, and coordination of donor-funded agriculture projects. The PMU oversees the implementation, coordination, monitoring and evaluation of various donor-funded agriculture projects in the MOA within the framework of the Liberia Agriculture Sector Investment Program (LASIP).

The PMU is managing and coordinating seven (7) distinct agriculture projects designed to rehabilitate the agriculture sector in a holistic manner by promoting and executing institutional and human capacity building initiatives, rehabilitation/construction, service delivery, supports etc. with the sole intent to engender food security and poverty alleviation in the country. These projects have been heavily engaged in undertaking series of agriculture related activities across the country and thus scored significant progress as indicated below:

2.2.6.1 Liberia Agriculture Sector Rehabilitation Projects

2.2.6.1.1 Liberia Agriculture Sector Rehabilitation Project (funded with AfDB grant)

The Liberia Agriculture Sector Rehabilitation Project (ASRP) supports Government of Liberia's effort to rehabilitate the agriculture sector with the specific objective to reduce poverty of the pro-poor by increasing income of farmers and rural entrepreneurs and contribute to food security. ASRP/AfDB Project, through the Ministry of Agriculture (MOA)/Government of Liberia (GOL) received a grant of US\$18.3million from the African Development Bank (AfDB) to improve the capacity of Liberia's Agricultural Sector and herewith enhance the sector's contribution to GDP, increase food security and farmers' incomes. The project will be implemented in six (6) years, 2010-2016 under three (3) components.

Component 1: Agriculture Infrastructure Rehabilitation Development- focuses on the rehabilitation of Water Management Infrastructure for an estimated 314 ha for lowland cultivation in Grand Gedeh, River Gee, Grand Kru and Maryland Counties; rehabilitation of feeder road, conducting detailed technical studies in preparation for future investment in irrigated rice farming on a proposed 7,000 ha lowland; and development of community infrastructures across the project counties.

Component 2: Agriculture Production and Productivity Improvement: concentrates on equipping farmers/beneficiaries with agronomic best practices to enhance their capacities for increased productivity and income on a sustainable basis; building the capacity of agriculture institutions (constructing MOA Offices in project counties); establishing and training Community Change Agents to facilitate transaction between farmers and agriculture inputs suppliers and/or produce buyers; and building the capacities of communities associated with the project to ensure sustainability of project activities.

Component 3: Project Management: Provides support for the effective and efficient management and coordination of activities implemented by the project.

2.2.6.1.1.1 Key achievements of ASRP (AfDB-funded) Project

Component 1: Agriculture Infrastructure Rehabilitation Development

- A total of 191.54 ha out of the targeted 314 ha of existing lowland have been rehabilitated. This represents 61% completion;
- Completed the construction and turned over to the local authority a 27 km Zwedru-Ziah Town Road. The road is now been observed under a six-month defect liability period;
- Constructed eighty-two (82) out of a total of 116 targeted culverts in the four (4) project counties;
- Construction of four (4) community infrastructures and MOA offices in project counties (Grand Gedeh, River Gee, Grand Kru and Maryland) are under construction with 24.1% completion. The construction works at these facilities retendered due to poor performance of the hired construction companies. Five (5) new contractors recently signed contracts for completion of these facilities.
- Conducted a detailed technical study for the development of 7,000 ha of new lowland for lowland rice cultivation. Under the first phase of the study. 4000 ha of lowlands have been identified. Presently, discussions are on-going for the commencement of Phase 2.

Component 2: Agricultural Production and Productivity Enhancement

- Introduced three (3) new and high yielding rice varieties in project implementation counties. These rice varieties, namely NERICA L-19, Suakoko-8 and WITTA-4, are currently used by farmers during production;
- Provided training for 1,493 (44%) out of a total of 3,400 targeted farmers in best agronomic practices, and introduced improved farming technologies/varieties for rice production in the four (4) project counties. Women constitute 60% of the beneficiary farmers who have been trained so far;
- Through the project interventions, farmers' rice yields per ha have increased compared with the baseline average yield of 1 mt/ha. Project farmers are now obtaining average rice yields in the range of 2 to 3.5 mt/ha for NERICA L-19; 2.9 to 3.3 mt/ha for Suakoko-8; and 2.8 to

3.4 mt/ha for WITTA-4. By 2015, the average yield of farmers is expected to reach the project target of 4 mt/ha;

- Trained forty (40) agriculture extension staff (with 40% women participation); 92 field staff and lead farmers in various aspects of lowland rice production/technology, best agronomic practices, water management, agriculture methods and approaches;
- Provided support for training nineteen (19) Subject Matter Specialists (17 MScs & 2 PhDs candidates). The 17 MSc candidates have completed their studies and the 2 PhD candidates are nearing completion of their programs of studies. Eleven (11) motorbikes, five (5) vehicles and office supplies and equipment have been provided to MOA Extension Staff to enhance their mobility and outreach activities in the project counties; and
- Provided training in basic literacy, numeracy and life skills for 1,422 project beneficiaries and community residents (comprising 488 males and 934 females). The beneficiaries can now identify, recite and write the alphabet correctly, draw objects and straight lines as well as prepare cost estimates for the purchase of farming inputs/implements and labor to cultivate the soil.

Component 3: Project Management

- A total of four (4) annual audits completed and approved by the AfDB thus far out of six audits to be conducted;
- Undertook four field/supervision as well as other intermittent missions to project sites to supervise, monitor, assess and validate the implementation status of activities ongoing across project counties;
- Developed and submitted to the AfDB the Term of Reference (TOR) for the procurement of a consultant to conduct the ASRP/AfDB-funded Project Mid Term Review (MTR) and prepare the project status implementation report. The review was to be conducted mid-August 2014 but was postponed owing to the outbreak of Ebola virus in the country. This will now be conducted at a later time as advised by the AfDB; and
- Organized and facilitated the hosting of a Project Steering Committee Meeting. To date, five (5) meetings out of a total of ten (10) planned meetings for the entire project duration have been conducted.

Constraints of ASRP (AfDB-funded) Project

- Delays by contractors to execute planned work activities in time have compromised the construction of the milling/processing and dam facilities;
- Non-and/or untimely payments of the hired workforce by the contractors;
- Most farmers consider lowland farming as a second choice and engage only in lowland farming when major farming activities in the upland are completed; and the farmers are not prioritizing their ownership of project activities;
- Lack of proper water management structures in place for water harvesting during the rainy season and for the irrigating the rehabilitated swamps areas during the dry season;
- Decrease in momentum of the conducts of Farmer Field School (FFS) and Functional Adult Literacy (FAL) across project communities,

2.2.6.1.2 Agriculture Sector Rehabilitation Project ASRP (funded with IFAD grant facility): The Government of Liberia received a US\$5 million grant from the International Fund for Agricultural Development (IFAD) for the implementation of a three-year (2010-2013) pilot project in Bomi, Gand Bassa, Grand Cape Mount and Montserrado Counties. The aim of this pilot project is to enhance the farmers' productive capacity through the provision of high yielding rice and cassava varieties, poultry and small ruminants to the farming communities. Four (4) International Non-Governmental Organizations (Action Aid, Africare, Concern World Wide and WeltHungerHilfe) services were contracted for the implementation of this project. The 3-year period ended March 2013, and resultantly marked the end of the first phase of the ASRP-IFAD funded project (ASRP-I). Having largely met its target, a consensus was reached for the extension of the Project to June 2014. This second phase of the ASRP Project became the ASRP-II. ASRP-II emphasizes the provision of a pilot extension services delivery to farmers through the existing 498 CBOs organized in the original US\$5 million grant (2009-2013) and the enhancement of 453 demonstration sites.

This Project is being funded through a supplementary financing of US\$2.5 million which was approved by IFAD and ratified by the Liberian National Legislature. In line with the current deconcentration policy of the MOA and the goals and objectives of ASRP as well as the furtherance of the public-private partnership, the project was contracted to the Farmer Union Network (FUN) to continue the project implementation in Bomi, Grand Bassa, Grand Cape Mount and Montserrado Counties. A three-pronged approach was adopted for the implementation in these four (4) Counties:

- (a) Build the capacity of Farmer Union Network of Liberia (FUN) to work directly with farmers to provide extension services,
- (b) Support the CACs and DAOs to enhance their capacity in extension services (trainer of FUN extension staff) and
- (c) Supervise, monitor, evaluate FUN activities.

The pilot ASRP extension service delivery project attempts to address the existing extension service gaps by promoting and establishing CBO-centered, demand-driven, and participatory extension support services for farmers' organizations led by the FUN. The following achievements were made during the reporting period:

2.2.6.1.2.1 Key achievements of the ASRP (IFAD-funded)

- FUN in collaboration with the MOA, have undertaken a diagnostic survey in the 4 designated project Counties and identified priority crops (rice, cassava, corn, peanuts and vegetables);
- Registered 221 lead farmers (170 males, 51 females): 21 rice farmers, 129 cassava farmers, 24 peanuts farmers, 47 corns/vegetables farmers;
- Trained 221 lead farmers and established 221 demonstration sites;
- Conducted Training of Trainers (TOT) for 17 FUN Extensions staff (1 female, 16 males);
- Provided a total of 3,808 pieces of assorted farming tools and equipment/basic farm inputs to 221 Lead farmers;
- Distributed 25,710 cassava bundles to 129 farmers, 3,350 kg of corn seeds to 47 corn/vegetables farmers, 1,200 kg of peanuts to 24 farmers and 525 kg of improved seed rice to 21 rice farmers.

- Strengthened and enhanced the capacity of extension staff and field technicians (4 CACs, 10 DAOs & Focal Person capacities in the four (4) project counties.

2.2.6.2 Italian Supplementary Funding (IT-67) Project

The Italian supplementary fund (IT-67) Project is aimed at fostering ownership, leadership and capacity building of farmers and their organizations relative to their structuring, institutional and economic issues in order to be proactive stakeholders within agricultural and food security programs and policies. The financing agreement for Italian supplementary US\$669,000.00 grant (IT-67) was signed between the GOL represented by the Ministry of Finance and Development Planning and IFAD. The MOA signed a project implementation Memorandum of Agreement with the Farmer Union Network of Liberia for farmers' consultation, mobilization and advocacy, and the capacity enhancement of FUN.

2.2.6.2.1 Achievements of the IT-67 Project

- Completed farmer's consultations and brought together 320 farmer representatives in 10 counties (Lofa, Gbarpolu, Bong, Nimba, Grand Bassa, Rivercess, Bomi, Cape Mount, Bomi and Montserrado);
- Conducted leadership training for all the platforms in 10 counties with 50 platform leaderships trained in governance of farmers organizations, reporting, budgeting, advocacy, decision making process, membership recruitment, communication and their roles and responsibilities including record keeping; and
- Developed county-level Platforms in Lofa, Gbarpolu, Bong, Nimba, Grand Bassa, Rivercess, Bomi and Montserrado Counties and provided them with office supplies and equipment.

2.2.6.3.2 Constraints of the IT-67 Project

Lack of access to credit and inputs; inadequate extension services and training; infrastructure, and organizational and structural issues are affecting FO's, market and information, etc.

2.2.6.3 Smallholder Tree Crop Revitalization Projects

2.2.6.3.1 Smallholder Tree Crop Revitalization Project (IFAD Credit Facility)

The Smallholder Tree Crop Revitalization Project (STCRSP) in Lofa County is a 5-year pilot project (2012–2017) with a total cost of US\$24.9 million, including the International Fund for Agricultural Development's (IFAD) highly concessional loan of US\$16.8 million, private sector exported contribution of US\$5 million, beneficiaries' contribution of US\$900 thousand, and the Government of Liberia (GOL's) contribution of \$2 million.

The STCRSP specific objectives are to: (i) increase the quantity of cocoa/coffee sold and price received by smallholder farmers by revitalizing these economic tree crops plantations, (ii) improve access to markets through rural roads rehabilitation and maintenance system development; and (iii) strengthen the MOA at county-level, private extension services delivery through the Liberia Agriculture and Assets Company (LAADCO), including 7 cooperatives in Lofa (Foya Maliandoe, Sebehil, Guma Mende, Voinjama District, Quardu Gboni, Quapatamai & Zorzor District). The Project was launched in September 2012.

2.2.6.3.1.1 Achievements of the STCRSP (IFAD Credit Facility)

Component 1: Revitalization of 15,000 hectare of Cocoa and Coffee Plantations

- Provided support for the rehabilitation of an additional 4,800 hectares of cocoa and coffee farms;
- Established 168 cluster nurseries, distributed 644,950 cocoa seedlings in the 7 districts of Lofa County and expected to distribute about 50,000 additional coffee seeds for re-filling of farms; and
- Sold to a private partner (LAADCO) **241.4 metric tons of cocoa** from 7 Cooperatives

Component 2: Rehabilitation of Farm-to-Market Roads

- Completed 75% of full rehabilitation of 60.2 km of farm-to-market road undertaken by 6 local contractors;
- Sensitized and mobilized 20 communities and completed the establishment of 20 Communities Road Maintenance Teams;
- Assessed additional 83km of farm-to-market roads for rehabilitation;

Component 3: Institutional Capacity Building

- Rehabilitated 3 central warehouses and constructed 15 mini warehouses;
- Provided 8 light vehicles, 2 trucks, 28 motorbikes, 37 laptops, 7 printers, 7 projectors, 16 GPS, 6 moisture meters and furniture, to 7 cooperatives;
- Constructed 5 of the 8 designated MOA's CAC & DAOs offices, with the remaining three (3) offices under construction; and
- Conducted training in various topics such as financial management, tree crops, M&E, agribusiness for 78 (67 males, 11 females) of the project stakeholders staff of the Cooperatives & MOA.

Component 4: Project Management

- Completed first year audit. Second year audit is ongoing; and
- Coordinated IFAD, MOA & MPW missions and conducted regular monitoring to report, recommend and resolve project issues

2.2.6.3.2 Smallholder Tree Crop Revitalization Project (funded with WB/IDA loan)

The Smallholder Tree Crops Revitalization Support Project (STCRSP) seeks to increase access to finance, inputs, technologies and markets for smallholder tree crop farmers in Liberia, and to develop a long term development program for the tree crops sector. The total costs of the project is estimated at around US\$23.1 million equivalent, which is funded by an IDA credit of US\$15 million, GOL funding of about US\$1.1 million, financial institutions contributions of US\$800,000, and beneficiaries in-kind inputs of around US\$6.2 million.

The project constitutes the first phase of a longer term tree crop development program that targets smallholders. It will test various rehabilitation, replanting and new planting models, and associated implementation and financing mechanisms for revitalizing the tree crop sector. These models will be implemented in partnerships with concessionaires/large firms, NGOs, farmer-based organizations (FBOs) and financial institutions in six (6) counties (Montserrado, Margibi, Bong, Nimba, Grand Gedeh, and Grand Bassa).

The first year of implementation of the Pilot Phase July 1, 2013 – June 30, 2014 was a mobilization year to get the main stakeholders ready for implementation of the Project. The project includes a strong learning initiative and is anchored on the following components:

Component 1: Smallholder Tree Crops Revitalization:

- a) **Cocoa/Coffee Revitalization:** the project focuses on providing support for rehabilitating, re-planting and extension of 7,500 ha cocoa/coffee farms in Bong, Nimba, and Grand Gedeh counties; technical and management advice to smallholders and their FBOs); quality promotion and market linkages; enhancing access of cocoa and coffee farmers and FBOs to adapted financial services; and development of small scale processing.
- b) **Small-scale Oil Palm Revitalization:** relates to revitalization of Dube Oil Palm Plantation in Konobo District in Grand Gedeh which is run by smallholders and support to rehabilitation/replanting of 600 ha of oil palm farms. The Project also builds the capacity of the existing cooperative; develops intermediate processing technologies; and promotes an out-growers scheme (600 ha) around a concessionaire, EPO-LIBINCO in Grand Bassa County.
- c) **Rubber Revitalization:** focuses on the planting and extension of rubber farms (2,600 ha) in Margibi and Montserrado Counties in partnership with two concessionaires and one large Liberian estate; and, rehabilitation of critical markets access roads in project areas.

Component 2: Institutional Building and Preparation of the Long Term Program

This sub-component aims to strengthen MoA's Technical Services (the MOA's PMU at Headquarters and County Agricultural Offices) and of the Cooperative Development Agency (CDA); elaborate national strategies for FBOs development, master plans for the targeted tree crops; securing land use rights of targeted smallholders; provides support to adaptive tree crop research; and preparation of the long term tree crop development program.

Component 3: Project Coordination and Management: ensures an effective coordination, management, and monitoring and evaluation (M&E) of the project.

2.2.6.3.2.1 Key achievements of STCRSP/WBa).

a). Smallholder Tree Crops Revitalization;

- Procured the services of Société de Coopération pour le Développement International (SOCODEVI) as the Operator to implement the Cocoa/Coffee Sub-Component;
- Completed staff recruited and acquisition of office space for SOCODEVI in Gbarnga (Bong), Ganta (Nimba), and Zwedru (Grand Gedeh) to facilitate the implementation of the sub-component;
- Conducted GPS training for twenty-three (23) staff from SOCODEVI, MOA County Agriculture Offices (CAOs), and CDA in June 2014. The objective of the training was to ensure that the beneficiary staff have the capacity to take geo-reference data of farmers' fields so that farmers' farm size and yield data are accurately measured;
- An intensive training on Perform Coop was conducted for 23 representatives of the SOCODEVI Field Team, CAOs and CDA staff of Bong, Nimba and Grand Gedeh in July 2014. Based on the training, staff will now proceed to review the FBOs to either

strengthen those that are viable and re-organize those that need to be reformed to meet the requirements of the Project. However, the nature of this exercise involving group meetings and group work with farmers, could not be implemented due to the EVD.

- Selected from sixty-one (61) targeted communities (9 in Bong, 34 in Nimba and 18 in Grand Gedeh) a total of 459 farmers (98 in Bong, 253 in Nimba and 108 in Grand Gedeh) beneficiaries for the implementation of the sub-component; and
- Production inputs have been procured but these could not be distributed to the farmers due to the EVD outbreak.

b). Small-scale Oil Palm Revitalization

- Free, Prior, Informed, Consent (FPIC) to deed the plantation to the Dube Multi-Purpose Farmers' Cooperatives was successfully conducted by the Land Commission (LC) and Statement of Declaration was made by the Community. LC will now proceed to deed the plantation;
- Facilitated the CDA for the successful conduct of a feasibility study on the Multi-Purpose Farmers' Cooperatives;
- EPO-LIBINCO is not interested managing the Dube Plantation in Grand Gedeh as originally planned, due to distance from EPO-LIBINCO Headquarters in Buchanan, Grand Bassa. Several attempts have been made in search of parties. Volunteers to Support International Efforts to Develop Africa, VoSIEDA, a Liberian NGO, expressed its interest in managing the Dube Plantation. Contracting arrangements will be implemented after no objection request.
- **Reference EPO-LIBINCO Out-growers Scheme (Grand Bassa 600 ha):**
 - a. Initial Site and Farmer identification carried out, farmers and Sites/Farms to be confirmed before next rainy season;
 - b. EPO-LIBINCO has identified a Sub-Project Manager to work with the PCU on the development of the Term of Reference (TOR) and development of the technical and financial proposals for the management of the smallholder oil palm out-growers scheme.
 - c. Management Contract will be finalized for implementation of Oil Palm Out-growers Scheme in Grand Bassa before the commencement of the next rainy season.

c). Rubber Revitalization

MARCO Out-grower Scheme (800 ha in Montserrado)

- Initial 300 ha out of 800 ha, and 100 farmers out of 500 farmers to be confirmed to work with the Project before next rainy season;
- MARCO and the CPU to finalize the hiring of Sub-Project Staff to implement the Rubber Sub-Component;
- Reviewed the Terms of Reference; prepared the Technical and Financial proposals and commenced the review of a draft management contract for the beginning of the Project sub-component implementation during the next planting season;
- **Reference SRC Out-growers Scheme (Margibi: 1,800 ha):**
 - a. Conducted the initial site and farmer identification; however SRC is no longer interested due to fall in rubber price and have since closed their processing facility and are

no longer buying latex from out-growers anymore. They are replanting their plantation;

b. The PCU has commenced search of another concessionaire/Operator (design issue)

- **Reference Long Term Credit (LTC) Line Management (Oil Palm and Rubber Sub-Components)**

- a. Due to the gestation period for rubber (6-7 years), oil palm (3-4), A long term credit line management was put in place for out-growers to continue taking care of young trees before maturity even after the Pilot Phase of the Project;
- b. Following the amendment of the Financing Agreement, the Ministry of Finance and Development Planning (MFDP) is now responsible for the overall management of the LTC. This decision was taken during the last Implementation Support Mission of the World Bank held from 24 March to 4 April, 2014.
- c. The Liberia Bank for Development and Investment (LBDI) has been identified as Agent Bank to manage the LTC, while Afriland First Bank (AFD) identified as the Participating Financing Institution (PFI) will be responsible for the loan disbursement to out grower schemes. AFB will conduct loan worthiness assessment of confirmed farmers and enter into some form of Contract with individual farmers as well as farmer organizations that these individual farmers belong to.

Institutional Building and Preparation of the Long Term Program

- Following the STCRSP (WB) Project launch at the National and at County levels in all the six counties, the PCU staff made many familiarization courtesy calls to stakeholder institutions such as Land Commission, Environment Protection Agency, and Cooperative Development Agency to discussed their implementation roles, responsibilities and Project support.
- Signed an MoU between the PCU and other stakeholders institutions namely Land Commission (LC), Cooperative Development Agency (CDA), and Environment Protection Agency (EPA) to formalize working relationships with them;
- Procured and handed over vehicles, motor cycles, office equipment, and office furniture to the MOA County Offices and the CDA in June 2014. Four (4) of the Project Double Cabin Pick Ups (3 for CDA and 1 for the PCU) were involved in the EVD eradication campaign. Two (2) of the CDA vehicles have been returned; and
- Provided technical and financial support to conduct the feasibility study for the transformation of the Liberia Produce Marketing Corporation (LPMC) to the Liberia Agriculture Commodity Regulatory Authority, LACRA. The WAAPP Project also provided financial contribution to this process; and
- In close collaboration with the EPA, the Project launched the Environment and Social Management Team (ESMT) on November 12, 2014 at the EPA Headquarters. The main objective of the ESMT is to verify that all the World Bank environmental and social safeguards as well as Liberian environmental laws triggered by the project, are adhered to. The key partner institutions are: EPA; MOA; Ministry of Land Mines and Energy (MLME); Ministry of Internal Affairs (MIA); Ministry of Gender and Development (MoGD); Forestry Development Authority (FDA); and CDA.

Project Coordination and Management

- Constituted an eighteen-member Project Steering Committee, comprising institutions such as MOA, MLME, EPA, MFDP, FUN, Ministry of Commerce and Industry (MoCI), LPMC, Central Bank of Liberia (CBL); Association of Micro-Finance Institutions (AMFI); CDA; LBDI; Liberia National Federation of Cooperatives (LNFC); Ministry of Public Works (MPW); Liberia Chamber of Commerce (LCC);
- The project's annual work plan and budget prepared and approved by the Project PCU and the Project Steering Committee, respectively;
- Recruited and mobilized an international Firm (Egis BDPA International) for the M&E Design, GIS, Baseline and Thematic Studies. Work had to stop until January 2015 due to the EVD outbreak; and
- Successfully conducted an audit for the first year (July 2013 – June 2014) of implementation of the Project. The audit was performed by an External Audit Firm, MGI-Monbo & Company.

Constraints of the STCRSP (WB/IDA-funded Project)

- The Project lost the first and second quarters of its Annual Work Plan and Budget as result of EVD outbreak. The Pilot Phase should be extended or the Long Term Program be triggered to start post-EVD outbreak.
- The arrangements with Concessionaires for the implementation of the oil palm and rubber sub-components are difficult to firm up due to unstable price of oil palm and rubber. SRC has pulled out of the design arrangements. The PCU is seeking for another arrangement for the Margibi County smallholder rubber out growers.

2.2.6.4 Agriculture Infrastructure Development Program (AIDP)

Out of a total of US\$37 million grant from WB/IDA for the Agriculture Infrastructure Development Project (AIDP), US\$8 million was allocated for the Agriculture Development Component. Balance funds were used by Ministry of Public Works (MOPW) for construction and rehabilitation of roads and bridges. For the Agriculture component, the emphasis is placed on strengthening seed multiplication; agricultural production and marketing; productive infrastructure; rehabilitation of rural roads; and improvement in policy formulation and monitoring capacity. Other importance is placed on collaboration between MOA and resident farmers, via FBOs, to increase the production and sales of quality rice seed; strengthening market linkages of FBOs and improve rehabilitated marketing infrastructure. The AIDP project implementation is anchored on three components as follow:

Component 1: Seed Multiplication component to establish basic seed for out-growers (through Africa Rice)

Component 2: The development of productive agricultural Infrastructures (through WFP);

Component 3: Strengthening Agriculture Value Chain (Through FAO)

2.2.6.4.1 Key achievements of AIDP

- Over 10 tons foundation and breeder seeds produced and distributed to over 27 out-growers groups. The seed rice provided to the out-growers in Lofa County were NERICA L-19 (3,732.5 kg), NERICA L-14 (1,320 kg) and Suakoko-8 (1,117.5 kg) ;
- Developed 71.5 ha of lowland, comprising 27.5 ha in Gbarpolu, 40 ha in Bomi and 4 ha in Grand Kru counties;
- Eight (8) Community Grain Reserves (CGRs) equipped with rice mills and post-harvest par-boiling tanks in Bomi, Gbarpolu and Grand Kru for 1,424 women beneficiaries (534 women in Gbarpolu, 356 women in Bomi and 534 women in Grand Kru). The project provided 154.7 mt of paddy rice to all the eight (8) CGRs in the three counties (Bomi, Gbarpolu and Grand Kru).
- Eighty (80) Farmers Based Organizations (40 in Lofa and 40 in Bong counties) with a total membership of 2,000 (1,000 in Lofa and 1,000 in Bong) were selected and established in twelve (12) FOB clusters in the two counties.

2.2.6.5 West Africa Agricultural Productivity Program (WAAPP)

The West Africa Agricultural Productivity Program (WAAPP-1C Liberia) was officially launched in 2012. It is a five-year Project funded by WB credit (US\$6 million) Japanese Trust Fund grant (US\$8 million) and Government of Liberia. The goals and the objectives of the project are to: (1) enhance food security, reduce importation of rice and increase incomes of small-holder rice producers; and (2) generate and accelerate the adoption of improved technologies for rice and cassava in Liberia. The WAAPP 1C Liberia focuses on adaptive research and advisory services for rice (Japan Trust Fund) and cassava (WB /IDA funding). The project is being implemented in eight (8) Counties (Grand Gedeh, Sinoe, Maryland, River Gee, Gbarpolu, Margibi, Bong and Bomi). The WAAPP 1C Liberia project is implemented under the following components:

Component 1: Establish enabling conditions for regional cooperation and market integration: This is geared towards establishing, rehabilitating and strengthening key national mechanisms, regulations and institutions, to allow Liberia benefit fully from the regional cooperation and market integration as a partner country under this West African regional agriculture program.

Component 2: Establish National Centers of Specializations (NCS): This seeks to provide support for rebuilding the basic national rice and cassava research capacity at CARI which would liaise with specialized Regional Agriculture Research Centers (RARCs) along the rice and cassava value chains (i.e. RARC in Sierra Leone, National center for irrigated rice in Mali, AfricaRice in Cote D'Ivoire, IITA, etc).

Component 3: Funding for demand driven technology generation, dissemination, and adoption: Aims at accelerating the adoption of readily available technologies and the generation and dissemination of adapted technologies for rice and cassava.

Component 4: Project Coordination, Management, Monitoring and Evaluation: aims at establishing an effective coordination, management and M&E system.

2.2.6.5.1 Key achievements of WAAPP

a). Establish enabling conditions for regional cooperation and market integration

- Published the ECOWAS regulations on Seeds, Pesticides and fertilizers in National Gazette. In collaboration with the USAID-funded FED project, 900 copies of the various regulations were printed and distributed to various stakeholders;
- In support of the Gender National Action Plan, two (2) major women leadership workshops were conducted in six (6) counties with over sixty (60) women being trained and exposed to gender-based violence and other precautionary measures during farming;
- Completed the re-designing and activation of the MOA's official website (www.moaliberia.org), which also hosts the WAAPP project (www.waappliberia.org) and Central Agricultural Research Institute (CARI) websites (www.cari-moaliberia.org) portals.
- Two Newsletters have been published under the project and distributed to partners and stakeholders in and out of Liberia.
- WAAPP Communication Strategy has also been developed which enforces the MOA efforts in disseminating information on the agriculture sector.
- Erected project bill boards and sign posts in the eight (8) counties with others pending construction.
- Conducted two (2) major workshops for Journalists to strengthen their capacity in reporting proper agricultural information.

b). Establishing National Centers of Specializations

- Provided support for the development of a ten-year Strategic Plan for CARI and the printing of 150 copies of the Strategic Plan, which is pending distribution;
- Supported the rehabilitation of four (4) residential buildings at CARI for the hosting of IITA and AfricaRice Scientists;
- Entered into long term agreements with AfricaRice and IITA to lead the Rice and Cassava interventions in Liberia. A Cassava Breeder has been seconded to CARI by the IITA, while a Rice Breeder and a Land and Water Management Specialists have been sent to CARI by the AfricaRice;
- Funded the advanced training of thirty seven (37) Liberians who are currently in the region undergoing their Masters and PhD studies. Twenty-one (21) of these students are in Makerere University; 7 in University of Cape Coast; 6 in Sokoine University of Agriculture; 2 in University of Nairobi and 1 in the Philippines. The Student from GIMPA has returned to Liberia to conduct this research;
- Negotiations and contract signed with Sheladia, the American-based firm for CARI supervision and Master Plan works.
- Recruited a lawyer develop the draft Act for CARI autonomy (A draft Act has been developed for this initiative).

c). Funding of Demand-Driven Technology Generation and Dissemination

- Set up two regional cassava nurseries in Bomi and Margibi Counties by IITA with support from WAAPP;
- Began seed rice multiplication on 40 hectares by a local farmer Organization Wede Agriculture Development Industry (WADI) in Grand Gedeh County;
- Reserved one hundred (100) metric tons of seed rice at the storage facilities at CARI;

- Established a 2 ha demonstration site in Sinoe County, which is being provided technical backstopping by the AfricaRice Scientists and Extension staff from the MOA's County Office in Sinoe;
- Provided support to the Booker Washington Institute (BWI) to establish a 3-ha site for multiplication of improved seed rice and cassava planting materials. Over 50 youth have been engaged in this intervention;
- Established various innovation platforms that are functional in the eight (8) WAAPP project Counties;
- Trained over 300 farmers in Grand Gedeh and River Gee counties and established 5 hectares of demonstration sites in both counties for the transfer for the System for Rice Intensification (SRI) technology to farmers in the Southeastern region. A local NGO, Community of Hope Agriculture Project has been recruited to implement for the WAAPP project the dissemination of this rice production technology to farmers.

d). Project Coordination, Management, Monitoring and Evaluation

- Established a functional M&E System at the WAAPP PCU for the tracking of indicators and implementation of the project activities;
- Conducted a baseline survey and submitted the final Report of the Survey in August 2014, following the receipt of inputs from various stakeholders;
- Completed the project second external audit in December 2014 and submitted the audit report to the MOA and the World Bank.

2.2.6.6 Climate Change Adaptation Agriculture Project

Climate change has been identified as a major threat to human existence, development and the ecosystems. As such, it continues to affect the socio-economic sectors of developed and developing countries thereby hindering the attainment of the MDGs. The impacts of climate change in Liberia are characterized by erratic weather patterns resulting into low agricultural productivity, unprecedented coastal erosion which has led to damage of infrastructure in our low-lying coastal cities, and the displacement of people into makeshift camps. The negative impacts of climate change on critical sectors like agriculture, health, energy, etc, continue to impede our development drive.

It is against the background that the GOL through the MOA and United Nation Development Program (UNDP) signed the Global Environment Fund (GEF) Agreement to implement the Least Developed Countries Facility (LDCF) Project titled: Enhancing Resilience of Climate Change by mainstreaming adaptation concerns into the agriculture sector development in Liberia. The CCAPP is a U\$2.5 million GEF-funded Project, which was launched in August 2012 and is being piloted in Bong and Grand Gedeh Counties. The CCAAP is serving as a vehicle for implementation of one of the priority actions coming from the Liberia National Adaptation Program of Action (NAPA).

The project is aimed at increasing the resilience of poor, agriculturally-dependent communities and decreasing the vulnerability of the agricultural sector to climate change in Liberia. It has two basic components: (1) Capacity Development for Climate Change Management in Agriculture Sector, and (2) Piloting Adaptation Strategies at Community Level. The targeted beneficiaries of the project include 60 Technical staff (30 males and 30 females) of the sector, 30 sector field

staff (15 males and 15 females), 100 university students (50 males and 50 females), 200 farmers (100 males and 100 females), NGOs/CSOs and Policy makers.

2.2.6.6.1 Key achievements of CCAAP

- A Climate Risk Management (CRM) Strategy for the agriculture sector is now finally in place. The CRMS and action plan will improve preparedness and enhance capacity of actors in the subsectors of the agriculture sector for disaster management and emergency response. It will assist in enhancing climate change coping mechanisms for farmers, especially those in the rural communities. A cross-sectorial task team was set up by the MOA to review the final draft Strategy document.
- Fifteen (15) County Agriculture Coordinators (CACs) and eight (8) District Agriculture Officers (DAOs) (extension workers), and four (4) county planners (2 County Development Officers and 2 County Project Planners) were trained to conduct climate vulnerability/risk assessments. Additionally, five (5) targeted technical staff from sector ministries/agencies (Planning and Economic Affairs (MPEA), Internal Affairs (MIA), EPA and Ministry of Transport) also underwent the the climate vulnerability/risk assessments training. This was part of implementation of the MOA’s Climate Change Management Capacity Development (CCMCD) Plan that was rolled out;
- In the two pilot counties of Bong and Grand Gedeh, two (2) separate climate change trainings and sensitization workshops were conducted for more than 200 students from eight (8) selected high schools in each of the two counties. Also benefitting from the trainings were 16 instructors from the selected schools. The training focused on the meaning, causes, hazards, vulnerabilities, risks and impacts of climate change on farming as captured from the assessments in Panta and Gbarzon Districts. The training also exposed participants to the current coping measures being undertaken by farmers and the innovations being tested for buidling farmers’ resilience. The training also delat with the gender dimension, especially the effects on women and their role in building resilience.
- Six (6) county extension staffs (2 CACs and 4 DAOs) got additional training in tracking and reporting activites at FFS and sharing with other farming communities to further strengthen capacity of the local county team to support farming communities.
- The project supported the participation of two staff of the Ministry of Agriculture and the then Ministry of Planning in the Economics of Climate Change Adaptation Training in Addis Ababa, Ethiopia. These will be a part of a team of Trainer of Trainers for the upcoming national survey of the cost and benefits of adaptation in Liberia as well as subsequent NAP processes, and the development of the a national climate change policy.
- Four (4) climate change agriculture adaptation innovations were tested at the eight pilot sites. These are listed in the Table below including the climate change problems they solve:

Innovation tested	Climate Change Problems	Results
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Traditional methods of control in lowland (dykes, resevoirs and inlet/outlet canals)	Both Flooding and water stress in the swamp rice farming	Well understood and articulated by farmers; enhance rice production
Planting cassava in ridges and bumps	Drought and erosion on upland	Initial results promising with crop survival rating at germination
Cowpeas and ground nuts on upland	Drought and soil degradation	Crops devastated by pest (insects); poor
Snail farming	Alternative livelihood	Only just beginning

2.2.6.7 Smallholder Agricultural Productivity Enhancement and Commercialization Project

The Smallholder Agricultural Productivity Enhancement and Commercialization (SAPEC) Project is a five-year project that is being implemented in 12 counties, excluding Bong, Lofa and Nimba Counties. The total cost of the SAPEC Project is approximately US\$54.4 million, funded through WB/Global Agriculture and Food Security Program (GAFSP) Trust Fund grant of US\$46.5 million, the African Development Fund (ADF)/AfDB loan of 6.4 million and GOL in-kind contribution of US\$1.5 million. Negotiations for the project between GOL, GAFSP, and the AfDB were concluded in May 2012; and the project was ratified by the National Legislature in 2013. The goal of the SAPEC project is to reduce rural poverty and household food insecurity. Its objective is to increase, on a sustainable basis, the income of smallholder farmers and rural entrepreneurs, particularly women, youths and the physically-challenged.

The project is designed to transform Liberian agriculture by moving 25,000 food insecure and low income farming households to commercially oriented agriculture with the aim of fostering economic growth. The implementation arrangements for the project are along the line of the ongoing AfDB, IFAD, World Bank and other donor projects in the MOA. The project will work in partnerships with two regional research institutions - the International Institute of Tropical Agriculture (IITA) and Africa Rice Centre to provide technical assistance to the MOA, farmer groups, private sector actors and NGOs. The IITA and Africa Rice Centre will work with competitively recruited NGOs and/or private sector firms to disseminate high yielding crop varieties and improved crop management techniques for adoption by farmers. The SAPEC Project is being implemented under four (4) components:

- (a) Sustainable Crop Production Intensification;
- (b) Value Addition and Marketing;
- (c) Capacity Building & Institutional Strengthening; and
- (d) Project Management.

2.2.6.7.1 Key achievements of SAPEC Management Structure

An efficient and reliable management system has been set up to handle the administration of the project through the recruitment of seven (7) qualified and experienced local professional staff.

County Project Launch and awareness creation

Successfully conducted the project launch in each of the twelve (12) counties of intervention (Grand Kru, Maryland, River Gee, Grand Gedeh, Sinoe, River Cess, Grand Bassa, Gbarpolu, Bomi, Grand Cape Mount, Montserrado and Margibi) from 14th April to 16th May 2014. The design and implementation modalities of the project, including stakeholders' roles and responsibilities were discussed with key stakeholders including Local Government Officials, development partners and NGOs operating in these counties during the launch.

Civil Works

- Identified and established GPS coordinates for the development of 87 ha of lowland in Grand Gedeh (30.2 ha), River Gee (22.2 ha), and Grand Kru (34.6 ha). Site specific technical designs for the remaining 913 hectares will be prepared by a consulting firm Hydroplan under a contractual arrangement with MOA/ASRP-AfDB funded Project. Preparation of Tender Document for the water management infrastructure is ongoing.
- Identified and established GPS coordinates for the rehabilitation of 270 km of feeder roads in Grand Gedeh (60km), River Gee (50km), Grand Kru (45km), Maryland (35km), Sinoe (40km), and River Cess (40km) Counties. Contracting of consulting firm to conduct road condition study is ongoing.
- Received EOI from Consulting Firms to conduct feasibility studies and prepare site specific designs, Bill of Quantities, and Scope of Work for the rehabilitation of 12 market centers, 3 MOA Technology Transfer Centers, and construction of 9 agribusiness centers, 9 warehouses, and 48 drying floors. Contracting of consulting firm to prepare the technical designs and Bill of Quantities is ongoing.
- Received bids from construction companies for refurbishing of a soil laboratory at the College of Agriculture & Forestry, University of Liberia (CAF/UL). Evaluation is ongoing.
- Completed technical design for construction of a soil laboratory at the College of Agriculture & Food Science, William V.S. Tubman University (CAFS/WVSTU). Tenders for works will be launched in January 2015.

Procurement of Goods and Services

- Procured office equipment (36 sets of desk and furniture, 24 desktops, 24 laptops & accessories, 12 sets of copiers, and 12 printers for County Agricultural Coordination Offices in the 12 project counties;
- Procured 12 pickups (4x4) for project implementation in the 12 counties;
- Procured office equipment (1 desk, 1 conference table, 6 chairs, 1 printer and 2 mini refrigerators) procured for the MOA's Head Office;
- Procured office equipment (10 laptops and 5 desktops, 5 printers, 2 photocopiers, 2 projectors, 8 sets of furniture and fixtures) for the Project Implementation Unit (PIU);
- Procured 3 pickups (4x4), 1 SUV Hardtop (4x4) and 1 mini-bus for the PIU; and
- Bids received for the supply of assorted farming tools for the 2014/2015 farming season. Evaluation process is ongoing.
- Letters of Agreement including Work Plans and Budgets are being finalized for Africa Rice Center (ARC) and the International Institute of Tropical Agriculture (IITA) to provide advisory and implementation services for rice and cassava to the SAPEC Project. Minutes of

Negotiations have been drafted and sent to both Africa Rice and IITA for review and comments.

- Published request for EOI for the provision of technology transfer services to the SAPEC Project. Deadline for submission of EOIs is 12th January 2015.
- Contracted Parker & Associates to provide auditing services to the SAPEC Project. The auditing of SAPEC financial records for the 2013-2014 fiscal year is ongoing.
- Received proposals from consulting firms to conduct socio-economic baseline studies. The evaluation of proposals pending.
- Finalized the short-listing reports for the recruitment of Agro-Processing Specialist and Office Assistant; and
- Published the request for applications for the positions of Project Focal Person and Extension Technicians. Deadline for submission of applications is 12th January 2015.

Sustainable Crop production Intensification

Established cassava multiplication nurseries in 8 Counties (Margibi, Bomi, Gbarpolu, Grand Cape Mount, Montserrado, Grand Bassa, Rivercess, Sinoe) for rapid multiplication of planting materials. Working through the FBO, three hundred (300) bundles of high yielding cassava cuttings have been planted for onward dissemination to farmers with the aim of raising the beneficiaries farmers' yield up to 25-40 ton/ha.

Capacity Building & Institutional Strengthening

- Provided scholarship to twenty (20) Liberians (45% females selected) for advance training in various agriculture disciplines at the Master-level. Due to the imposed Ebola travel ban, only sixteen (16) candidates who received placement travelled and commenced the studies at the following African universities:
 - a. Kwame Nkrumah (Ghana) – 5 Candidates
 - b. Makerere (Uganda) – 2 Candidates
 - c. Sokoine (Tanzania) – 5 Candidates
 - d. Eastern Africa Statistical Training Center (Tanzania) – 1 Candidate
 - e. University of Nairobi (Kenya) – 1 Candidate; and
 - f. Jomo Kenyatta University (Kenya) – 2 CandidatesThe remaining four (4) students will depart Liberia for their studies in 2015 when travel conditions have improved; and
- Forty (40) Bachelor's degree Candidates (30% female) selected from the College of Agriculture & Forestry, University of Liberia and Cuttington University and awarded scholarship.

Staff Development Support (Instructor Recruitment and Staff Capacity Building)

We are currently working with both the College of Agriculture and Forestry at the University of Liberia and College of Agriculture and Food Sciences at the William V. S. Tubman University to provide staff development support. The project will assist with the recruitment of additional instructional staff and build their capacities over a two year period.

2.2.7 Joint Japan-Liberia Food Aid Project

Agriculture is the mainstay of the Liberian Economy and a strategic engine to economic recovery, growth and sustainable development. Rice, in particular, is Liberia's main staple food. The annual per capital consumption of rice is estimated at 53 kg, which is one of the highest in Africa. The

Joint-Japan Liberia Food Aid Project is funded by the Government of Japan through proceeds generated from the monetization of donated rice by the Japanese Government. Under this project, seed rice are bought from certified seed growers and subsequently distributed to farmers in support of increased rice production for food security. Additionally, the Project purchases at farm-gate price paddy rice that is determined by the farmers to be in excess of their own food and social needs, and their requirement for seeds for the next planting season. The paddy rice is milled at rice processing facilities managed by the MOA and sold on the local Liberian market with the intention to reduce the quantities of rice being imported into the country. The Project also provides appropriate agriculture machinery, technology and warehouses to increase rice production and ease post-harvest handling difficulties. The first three-year phase of the Project started in 2010 and ended 2013. In 2014, the Japanese Government approved and provided additional funding to commence the implementation of the second phase of the Project over a two-year period (2014 – 2016).

Achievements of the Joint Japan-Liberia Food Aid Project

During the reporting period, the following were achieved under the Japan-Liberia Food Aid Program:

- Purchased 741 mt of paddy rice and 20 mt of seed rice from 820 farmers in seven (7) counties (Lofa, Bong, Gbarpolu, Rivercess, Bomi, Cape Mount and Nimba counties);
- Produced 142.55 mt of milled rice. The rice was sold to the World Food Program (WFP) for Liberia School feeding program;
- Received approval and additional funding from the Japanese Government for the implementation of the second round of the Project;
- Purchased the following equipment to support rice production and processing across the country:
 - 15 power tillers
 - 15 thresher (machine driven),
 - Five (5) generators (27 kva each) and
 - Five (5) Treadle Pumps.
- Completed the procurement process with the award of contracts to three (3) Liberian Construction Companies (Kingdom Business Inc, Jusmart Engineers (Lib) Inc, and Ammeton Construction Company) for the construction of five (5) modern warehouses in the following counties:
 - 1 in Sanoyea, Bong County
 - 2 Lofa (1 in Foya and 1 in Voinjama)
 - 1 Sacleypea, Nimba and
 - 1 Zwedru, Grand Gedeh

2.2.8 MOA Response to the Ebola Crisis

In an effort to adequately respond to the prevailing Ebola situation in the country, the Ministry of Agriculture established an Ebola Situation Room at its Gardnesville office complex. The intent of this decision was to create an enabling environment for the Ministry to quickly respond to the Ebola situation from the perspective of Agriculture and Food Security, and at the same time plan

future interventions. To properly carry out this task, the Ministry divided its response activities into three phases - the emergency phase, the recovery phase and the post recovery phase. The interventions under the different phases were meant to address the problems on an as and when basis. It became clear that immediate attention was needed to solve some of the Ebola related problems, while medium to long term planning is required to solve other Ebola related problems. The interventions and responses of the MOA under the different phases are discussed below:

Phase I: Emergency

The setting up of the MOA Ebola Situation Room was simultaneous with the start of the emergency phase of our interventions and coincided with the declaration of the State of Emergency by Her Excellency President Ellen Johnson Sirleaf. During the emergency phase, the Ministry commenced working along with the Ebola taskforce, the Economic Management Team (EMT), other clusters and line Ministries and Agencies as well as Development Partners. The major focus during this period was placed on gathering agricultural and food security information, which is relevant for policy making and other interventions in the prevention and containment of Ebola. The MOA carried on the following activities during the Emergency Phase:

a) Rapid Assessment

The MOA with its key partners, LISGIS, FAO and WFP, jointly initiated a need assessment process to determine the impacts of Ebola on food security and farming households, and to generate information for possible assistance to all affected communities. A calling center was set up at the MOA Head Office and a team of enumerators were trained to collect information via cell phones. Basic agriculture and food security data were collected from the 15 Counties. The assessment tools were developed for the purpose of collecting the needed information from selected informants, who were knowledgeable of the prevailing food security and agricultural issues in the wake of the Ebola crisis across the Country. The information was collected and analyzed to inform policy makers on the kinds of interventions.

b) Estimation of Food requirements

The MOA urgently worked with the WFP and others partners to plan for possible assistance and food distribution to Ebola affected communities across the Country. This had required the estimation of the number of the affected population. The MOA, along with WFP, established working figures and estimates of food requirements on a ration scale of 2100 kilocalories per person per day. The estimates were done using three different scenarios - 50 and 70 percent of the entire population and as well as for the estimated numbers of the food insecure and vulnerable population based on results of the 2012 Comprehensive Food Security and Nutrition Survey.

c) Market Assessment

In the wake of the Ebola outbreak, market prices around the country increased due to higher transportation fares and restricted movement of people to and from Ebola affected areas. This has led to a consequent disruption of normal trade and commerce. The Ministry of Agriculture embarked on a rapid assessment to determine the impact of the Ebola Outbreak on supply and prices of commodities, especially local produce and staple food items. The assessment covered

Redlight Market (Paynesville, eastern Monrovia suburb) and Duala Market (Duala, Bushord Island northwestern Monrovia suburb), which are the main entry points of local food commodities to Monrovia.

d) Purchase and Milling of Paddy

The MOA, through the Joint Japan-Liberia Food Aid Project reached out to farmers with surplus rice and purchased their paddy rice at farm gate. The paddy rice was subsequently milled the paddy rice. This intervention was intended to create market for farmers in restricted areas and at the same time contribute to the supply of rice on the local market.

Phase II: Recovery Phase

Information that was collected under the emergency phase provided the basis for intervention under the recovery phase. The MOA and key players in the sector developed measures to respond to the EVD and mitigate its impacts on farming communities. These measures were consistent with the Economic Stabilization and Recovery Plan (ESRP) developed by the MOFDP. Under the ESRP, the sector's interventions were developed into immediate to short term interventions (Recovery Phase) and medium to long term interventions (Post Recovery Phase). The Recovery Phase interventions are geared towards the immediate recovery of affected farming communities. The following six (6) Quick Impact Projects were developed and considered for implementation during the Recovery Phase:

- Certified Seed Rice Purchase and Multiplication,
- Corn Production for Food and Feed,
- Multiplication of Cassava Planting Materials and Value Addition Development
- Support to Cowpea Production,
- Peri-Urban Community Garden Project, and
- Multiplication Centers for Piggery.

Phase III: Post Recovery Phase

The Post Recovery Phase interventions focus on long term development interventions in the sector. The Post Recovery Phase is expected to put us back on the trajectory of national growth and development; and it looks at our interventions within the context of the Agenda for Transformation (AFT). As part of this process, five project concepts were developed for inclusion into the European Union Portfolio to Liberia. The MOA and EU completed the different project templates and started negotiations. The following five projects, with a total indicative cost of 29 Million Euros, were developed under the EU portfolio:

- Support to the revitalization of the Livestock sector in Liberia;
- Fruits and Vegetables production and Value Addition;
- Support to the Rice value chain;
- Support to the Cassava Value Chain; and
- Fish cage farming.

Other long term projects and programs that have been proposed for the Post Recovery Phase include:

- Promote the adoption and up-scaling of agro-mechanization in Liberia Agriculture (land preparation, production and processing);
- Strengthening on-going capacity in research discipline and infrastructure development to be on par with research capacities on the 21st century; and
- Strengthen public-private partnership (PPP) arrangements in tree crops production and processing to increase export earnings.

2.3 Department of Regional Development, Research and Extension

The Department of Regional Development, Research and Extension (DRDRE) is technically the operative arm of the MOA, and it has the core function of delivering agricultural extension services to farmers in order to empower them and improve their productivity, income and employment potentials. To ensure the effective and efficient delivery of these services to farmers, the Ministry accelerated its effort to decentralize its structure in the 15 counties with the establishment of County Agricultural Offices. These Field Offices provide support for agricultural development endeavors in these counties. To date, the Ministry has its own office buildings in all Counties, except Sinoe, where the Ministry runs its office out of the County Administrative Building. The MOA is working towards having its offices in all 15 counties by 2014. The DRDRE plans to enhance farmers' production through the provision of more efficient farm equipment at county level for farmers to use at a cost for service. Rice mills have been installed at the Technology and Input Distribution Centers in selected counties to assist farmers in value addition.

2.3.1 Activities of DRDRE

Key among the planned activities include:

- Sensitizing farmers to see agriculture as a business;
- Taking the validated national extension policy to the pilot counties;
- Creating innovative platforms to adequately deliver extension services;
- Re-aligning personnel at county level to strengthen service delivery;
- Collecting and analyzing field data and submit report that capture the service delivery activities of the MOA at the county-level;
- Providing technical backstopping to farmers;
- Enhancing technology dissemination by field technicians through the creation of training materials;
- Producing extension messages in selected local languages for easier communication; and
- Capacity building of the field staff to enhance service delivery in all counties

2.3.2 Achievements of DRDRE

- With technical support from FAO and in collaboration with the Department of Planning and Development, identified and sent 15 DAOs (each per county) for data collection training (Epicollect Training) with the use of *smart-phones* (Android);
- Distributed over 26 farm machinery such as power tillers and tractors to county offices in order to provide mechanized services (land preparation activated) to enhance farmers crop production activities;

- In close collaboration with the Department of Technical Services successfully contained caterpillar (*Achaea Catocaloides*) outbreak across the country with the first case being reported in Careysburg District, Montserrado County;
- In close collaboration with CARI, conducted germination test on varieties of improved seed rice (5 varieties: NL-19; LAC-23; S-8; Wita-4 & Br-11) that was intended for onward distribution to the counties for 2014 planting season. The test results showed an average germination rate of 96.9%;
- Collaborated with WFP for the successful field visitation of Her Royal Highness Princess Haya to the WFP's Productive Safety Nets Sites in Bomi & Gbarpolu Counties where there is an-going school feeding of girls' students;
- Seven (7) extension field staff (5 males & 2 females) successfully participated in a 5-day seed rice certification training program that was organized and facilitated by staff of the CARI. Additionally, 30 DAOs (2 DAOs per County) capacity was enhanced through a training in "Seed Inspection";
- With technical support from the African Forum for Agricultural Advisory Services (AFAAS), the department facilitated the visit of the AFAAS Executive Director, Dr. Salim Nahdy and Technical Assistant, Mr. Max Oloput from AFAAS headquarters in Kampala, Uganda. The Department successfully hosted a one-day agricultural stakeholders meeting with 60 participants for the establishment/formation of Liberia's-AFAAS country forum under the guidance of the Agriculture Coordinating Committee in the MOA;
- Collaborated with Sime Darby in the assessment and payment of US\$176,640.37 to 199 smallholder farmers affected by this company's engagement in Bomi County;
- Community Outreach Initiative: Under the newly launched MOA's Community Outreach/Garden Initiative, provided technical backstopping and planting materials, basically seeds/seedlings to over 120 individual smallholder farmers and 25 farming groups in Montserrado County and its environs. A 3.5-acre demonstration site under the community outreach program, was established at the University of Liberia's Fendell Campus, Montserrado County, for the production of improved seeds for onward distribution to farmers in the country. The site is presently being cultivated with maize;
- By June 2014 with our urban communities vegetable production program in Montserrado County, we have reached 32 farmers. To date, we have reached 517 gardeners/farmers in more than 75 communities in our test case in Montserrado County. Our target for this county is 1000. Thereafter we will be ready to take this program nationwide by June 2015. We provide improved planting materials including seeds and seedlings from our home-grown nurseries around the MOA Office Compound on the Somalia Drive along with needed agro-chemicals; and
- Carried out an assessment and identified markets across the country for the sale of major food commodities. This is in an effort to promote the timely sale of farm produce.

Table 3.1: Number of Farmers Engaged in Crop Production

County	Rice	Cassava	Vegetable	Tree Crop	Total Farmer reached per County
Bomi	185	74	9	324	592
Bong	5729	2712	1241	897	10579
Gbarpolu	2700	97	105	275	3177
Grand Bassa	967	1246	532	175	2920
Grand Cape Mount	289	293	102	42	726
Grand Gedeh	1185	18	31	408	1642
Grand Kru	117	80	16	133	346
Lofa	8095	1082	301	2050	11528
Margibi	79	77	123	765	1044
Maryland	212	94	39	27	372
Montserrado	235	978	1245	842	3300
Nimba	4316	1815	1573	8795	16499
Rivercess	1479	89	75	69	1712
River Gee	4326	2173	1351	3813	11663
Sinoe	342	523	210	423	1498
Total	30256	11351	6953	19038	67598

Table 3.2: Number of Farmers Engaged in Animal Production

County	Poultry	Small Ru-minants	Piggery	Cattle	Animal Farmer per County
Bomi	225	325	54	15	619
Bong	423	648	105	34	1210
Gbarpolu	175	320	68	123	686
Grand Bassa	1234	275	336	23	1868
Grand Cape Mount	845	1309	5	3	2162
Grand Gedeh	340	400	75	178	993
Grand Kru	143	86	28	56	313
Lofa	108	279	136	52	575
Margibi	180	146	85	11	422
Maryland	350	155	75	96	676
Montserrado	375	90	185	105	755
Nimba	2300	2600	225	40	5165
Rivercess	125	70	85	23	303
River Gee	345	860	5	16	1226
Sinoe	186	98	110	12	406
Total	7354	7661	1577	787	17379

Table 3.3: Number of Farmers Engaged in Fishery

County	Marine	Fresh Water	Fishery per County
Bomi	0	6	6
Bong	0	15	15
Gbarpolu	0	23	23
Grand Bassa	45	20	65
Grand Cape Mount	573	77	650
Grand Gedeh	0	35	35
Grand Kru	340	10	350
Lofa	0	17	17
Margibi	43	22	65
Maryland	52	22	74
Montserrado	110	12	122
Nimba	0	286	286
Rivercess	26	13	39
River Gee	0	6	6
Sinoe	35	5	40
Total	1224	569	1793

2.3.2 Challenges of DRDRE

- Inadequate funding is impeding the revitalization of the extension delivery services; institutional capacity building; number and capacity of extension personnel and extension-to-farmer ratios;
- Poor quality petroleum products outside of Monrovia is taking a toll on the longevity of the Ministry field transport equipment;
- The need for the establishment of a national farmer database cannot be over emphasized. It is hope that in creating such database on farmers, the use of modern data collection tools such as the GIS/GPS will be fully exploited;
- The difficulties in communicating with field extension officers and farmers in the counties due to poor telecommunication connectivity outside of the counties capital cities, have remained major concerns in service delivery. Although the GSM Service Providers are providing internet services in the country, accessing high speed internet connectivity is generally not possible outside the county capital of Monrovia. This is a major constraint to the provision of electronic-extension/e-extension services in Liberia. These impeding communication factors also continue to adversely affect timely submission of field reports from extension offices in the field; and
- Frequent field vehicles and motor bikes break-downs as a result of the poor road condition in the country, especially in getting to the “hard-to-reach” places and the associated

high cost of their repairs remain a hindrance to effective and efficient agricultural extension and advisory services delivery.

2.4 Department of Technical Services

The Department of Technical Services comprises the Animal Resource (Livestock); Crop Resource; Land and Water Resources; and Quarantine and Environmental Services Divisions; and the Bureau of National Fisheries (BNF). It is responsible for providing technical information and support for all agricultural production entities and users within the confines of Liberia. The Department accumulates, synthesizes and evaluates technical information for applicability and adoption to Liberia farm conditions, and packages them for dissemination through the Extension Department.

The Department also provides technical oversight responsibility to the Central Agriculture Research Institute (CARI) and the Bureau of National Fisheries (BNF). The Department has also been involved in program planning, and represented the Government of Liberia in a number of sub-regional meetings and conferences on agriculture matters.

2.4.1 Animal Resources Division (Livestock Section)

The Bureau of livestock, under the supervision of the Technical Department of the Ministry of Agriculture, is responsible for all livestock activities including poultry and fishery. Since the inception of this government in 2005, the issue of restocking has taken a dramatic trend with much progress made so far, but a lot more is needed to be done to improve the livestock subsector. Livestock plays a major role in the nutritional improvement of our rural dwellers as well as those in the urban areas.

For the reporting year, the Bureau was able to carry out a number of activities geared toward raising the standard of production and animal health across the country. Below are activities, achievements and constraints that were encountered during the period under review.

2.4.1.1 Activities of Animal Resources Division

- Collaboration with all NGO's and INGO's on restocking activities in the country;
- The control of cross borders movement of animals to avoid/control the introduction of trans-boundary animal diseases and zoonosis;
- Monitoring and inspection of animals at the Monrovia slaughter house and slaughter slabs in the country; and
- Conduction of trainings for all County Livestock Officers/Veterinary Assistants as well as Community Animal Health Workers (CAHW) in the areas below:
 - Animal production and production systems
 - Animal health and diseases control and diagnosis
 - Drug administration to livestock
 - Animal disease survey methodology
 - Basic husbandry practices
 - Control and distribution of live vaccines
 - Collection and preservation of specimen

2.4.1.2 Achievements of Animal Resources Division

Generated US\$9,326.00 in revenue through the issuance of import/export permits.

Training: through staff development initiatives, 1 staff acquired specialized training in poultry disease control while 2 staffs are currently studying for their Masters abroad.

Data on animals slaughtered - coordinated the slaughter of 1,466 cattle, 396 goats and 356 sheep and ensured that the animals were healthy for human consumption.

Farmers Support - The Bureau supported farmers and pet owners with treatment/medication for pets and other domestic animals.

Project Implementation: The Bureau is currently implementing the ICIPE Bee Health Project with the objective of enhancing the capacity of ECOWAS Anglophone member states in the areas insect science and food security by the establishment of a regional satellite stations in a number of selected countries, including Liberia.

2.4.1.3 Constraints of Animal Resources Division

Inadequate laboratory tool and equipment such as water distillation plant, incinerators, PH meters, ELISA kit for diagnosing Foot and Mouth Disease (FMD), African Swine Fever (ASF) and Pest des Petits *Ruminants* (PPR), essential veterinary drugs; disposable pit incinerator; Bunsen burner and florescent microscope for rabies diagnosis; and logistical support including GIS/GPS gadgets, motorbikes and vehicles, maintenance and repairs motorbikes and vehicles are among the major constraints facing the Bureau at present.

2.4.2 Crop Resource Division

The Division comprises Food and Tree Crop Sections, which provides technical advisory services in food and tree crops husbandry, respectively. The Crop Resource Division also performs other activities including conducting germination testing on crops; field visitation/assessment and pest managements. The Division has established the Pest Control Rapid Response Teams at both the central Office and at County level.

Activities planned for implementation during the reporting year include a) Pest Management Training Workshop for technicians; b) exercises involving the prevention of EBOLA on the MOA Compound; c) pre-positioning of chemicals and equipment in the 15 Counties for quick response to insect outbreak and; d) preparedness for rapid action in the control of insect/pest outbreak anywhere in the country.

2.4.2.1 Achievements of Crop Resource Division

- With support from the South-South Cooperation Program (SSC), the Division conducted a Pest Management training workshop for 6 technicians from Klay, Bomi, Central Songhai, Montserrado, Salala, and CARI. Additionally, with ZOA's support the Division facilitated a Pest Management training workshop for 2 County Agriculture Coordinators (CAC) and 10 District Agriculture Officers (DAO) from Margibi and Montserrado Counties;
- Conducted periodic chlorination exercises on the MoA premises including the main compound, Bureau of National Fisheries (BNF) and the Program Management Unit (PMU) Office complex;

- Suppressed caterpillar infestation which lasted for a period of three (3) months (May-July). Seven (7) Counties (Montserrado, Gbarpolu, Lofa, Bong, Nimba, Maryland and Grand Kru) were infested by the caterpillar *Achaea sp.* At least 399 towns and 202 farms were infested. Sixteen (16) well equipped Teams of spraying technicians dispatched by MOA to the infested Counties successfully cordoned and controlled the situation with assistance from a total of 98 Community Volunteers;
- Provided pest management outreach services to MOA implemented projects in Montserrado, Margibi, and Bong Counties;
- Conducted insects/pests control exercises against scale insects, termites, ants, and black citrus aphids on a 5-acre citrus farm owned by Mrs. Mai Horton;
- Conducted spraying exercises against whiteflies and mealy-bugs affecting vegetables and flowers in some residential compounds in Monrovia; and
- Supported the Smallholder Tree Crop Rehabilitation Support Program (STCRSP) in sites inspection, verification and selection in 3 Counties (Bong, Nimba and Grand Gedeh) in preparation for project implementation;

2.4.3 Land and Water Development Division

The Land & Water Development Division performs a facilitation role for the increased use of land and water resources for agriculture purpose in Liberia. It supports the use of water for irrigation purpose for lowland crops and conducts land capability studies on agricultural lands. The Division provides technical support in agriculture engineering, especially in agricultural land improvement initiatives involving irrigation/drainage works, soils and fertilizer use, land use planning and management.

2.4.4 National Quarantine and Environmental Services

The National Quarantine and Environmental Services Division has the mandate to prevent entry into Liberia of injurious plant and animal pests and diseases existing in foreign countries; prevents the spread of such pests and diseases should they become established in Liberia. It regulates the export of plants and animals to conserve dwindling species and preserves the food supplies of Liberia. Thus, the Division attains these responsibilities by performing routine inspections and monitoring of the movements of agricultural commodities, especially plants and animals products which are either transported alive or processed. Agro-chemicals are inspected at the various ports of entry as well. The Division also issues and generates funds from Phytosanitary Certificates, Import and Export Permits. The funds raised are deposited into the National Government accounts.

2.4.4.1 Achievements of National Quarantine and Environmental Services

- The amount of US\$6,500 and L\$2,500 was generated in revenue through the issuance of phytosanitary certificates while US\$1,246.24 and L\$2,236.25 generated through the issuance of export permits for plant products.
- Additionally US\$22,344.34 and L\$250 was generated through the issuance of import permits for plant products while US\$10,063.00 and L\$4,100 was generated from other charges (assorted agricultural commodities and fines).

- Quarantine inspected and monitored the movements of a) agricultural commodities (plants, animals and agro-chemicals) at ports of entry (land, sea & air), and b) the movement of ships, aircrafts, vehicles, packaging materials and warehouses for the movement of cargo at ports of entry.
- Nine (9) gratis permits and phytosanitary certificates were issued to embassies, NGO/INGOs and GOL institutions.

2.4.4.2 Challenges of National Quarantine and Environmental Services

There are 32 boarder points out of which 14 are major points to be manned by the Division. Currently, the Division has only 9 major boarder points covered. There is a dire need to reinforce the manpower of the Division to cover all boarder points for high performance.

2.4.5 Urban and Peri-Urban Division

Food security in rural Liberia has remained at the same level with about every second household experiencing poor or borderline food consumption. However, food insecurity has increased in the Greater Monrovia area due to food price hikes and the country's dependency on food imports. The increasing demand for vegetables and livestock products by city dwellers offered great opportunities for the increasing number of Urban and Peri-Urban (UPA) farmers. Over the years, the urban and peri-urban vegetables production activities have proved profitable in terms of generating income and its contributions to the attainment of food security and nutrition for farm families and the city dwellers as well as keeping the environment very clean and attractive.

2.4.5.1 Achievements of Urban and Peri-Urban Division

- UPA provided support to 1,000 farmers in Monrovia and surrounding communities. These farmers were encouraged to become members of the Federation of Liberian Union Farmers' Association (FLUFA).
- Distributed assorted vegetable seeds to the farmers and trained them in good vegetable production practices in areas such as effective land selection, nursery development, production land preparation, planting/transplanting, compost making using kitchen waste, application of compost, pest control etc.
- Provided labour saving device (power tillers, threshers and winnowers) services farmers in order to ease their work and find more time to do other needed tasks.
- Provided Technical backstopping to Farmer Sirleaf Farm which supported the National Seed Bank at CARI with 555 kg of improved seed rice for distribution to Liberian rice farmers
- Empty bags were issued to beneficiary farmers of the UPA Program to store their harvested rice.
- In a new development, UPA will provide market development support to farmers to improve the marketability of farmers' products.

2.4.6 Bureau of National Fisheries

The Bureau of National Fisheries (BNF) comprises of three main Divisions: namely Marine, Research & Statistics, and Aquaculture & Inland Fisheries. The BNF has the statutory responsibility to monitor, supervise and coordinate all fishing activities in the Republic of Liberia. It also collaborates with Liberia Coast Guard of the Ministry of Defense, Liberia Maritime Authority (LMA), and Ministry of Justice (MOJ) in enforcing adherence to fisheries policies and regulations. With this collaboration and the help of the Fisheries Monitoring Center (FMC), established

by BNF/MOA through the WARFP project, BNF has somehow succeeded in combating Illegal Unregulated Unreported (IUU) fishing. The Bureau of National Fisheries heavily relies on donor's funding to implement fisheries projects gear towards the development of the fisheries sector. Most of these supports are directed in the areas of capacity building, value addition, small scale fish farming, Monitoring, Control and Surveillance (MCS). However, over the years significant steps towards the development of the fisheries sector have been realized through the following projects: WARFP, ACP-Fish Project, EAF-Nansen, TCP/FAO Project, GOL Inland Fishery Development Project, and APDRA/IFIDEP Inland Fish Farming Development

2.4.6.1 Achievements of the Bureau of National Fisheries

- **Revenue generation** - generated revenue in the amounts of US\$46,462.84 from the issuance of import for 22,581.39 tons of fish; approximately L\$14,659.00 and US\$780.50 from the issuance of export permits for 50 tons of dry fish and fish guts; and L\$1,726,900.00 from the registration and licensing of canoes, and US\$1,925.00 from registration and fine of recreational boats . The BNF held meeting with the newly established Liberia Revenue Authority (LRA) to discuss way forward for improved revenue generation from the fisheries sector;
- **Collaboration against IUU** – in partnership with LCG, LMA and UNMIL conducted fish monitoring exercises through sea and air patrols to deter IUU fishing in fisheries waters of Liberia;
- **Fish date** - collected and maintained catch data/registry at the various fish landing sites. Fish species include snapper, cassava fish, gbapleh, poor joe, grouper, barracuda, pipe fish, bony, etc.;
- **Finalization of the Tuna Agreement/MOU**: held a joint Liberia-EU meeting in Monrovia to discuss and finalize the Tuna Agreement/MOU
- **Training** – 2 BNF staff (1 male & 1 female) obtained Master's Degree in Fisheries Management and Coastal Zone Management from the University of Ghana and an additional 1 staff was awarded the MOA/SAPEC scholarship for training at the master-level in Tanzania; 4 senior staff participated in a 10-week advanced administrative training at the Ghana Institute of Management & Public Administration (GIMPA); 1 staff benefited from a short-term training in China, 1 staff participated in ECOWAS-MESA workshop in Ghana, BNF conducted workshops on (1) Fish Health & Sanitary Condition for Fish Inspectors and stakeholders and (2) Good Hygiene Practices for Fish Processors & Traders for value addition to fish;
- **Conference/seminar** – 1 senior staff participated in the Ordinary Session of the ATLAFCO 2014 Ministerial Conference in Morocco;
- **Policy Documents** –reviewed and consolidated the National Aquaculture Policy and Implementation (NAPIS) and the Fisheries and & Aquaculture Policy and Strategy (FAPS); Five (5) separate draft policy documents developed and awaiting further review and validation by stakeholders
- **Land donation by local authorities for BNF activities** - 5 acres donated by the people of Little Bassa Town in Grand Bassa County for the construction of fish landing cluster and 7 acres donated by GoL at Omega Tower Community for the construction of BNF permanent headquarters;

2.4.6.2 Challenges of the Bureau of National Fisheries

During the year the Bureau encountered the following major challenges: a) Delay in issuance of licenses to tax payers, especially fishermen; b) limited capacity of LCG boats to pursue IUU vessels to collect information on violation; limited capacity of BNF to gather relevant fish data from landing sites outside of Montserrado; c) slowdown on work due to the EBOLA virus disease; d) the reluctance of partners and stakeholders to act (input) quickly on policy & strategy documents.

2.4.7 West Africa Regional Fisheries Project

The West Africa Regional Fisheries Project (WARFP) is a series of overlapping Adaptable Program Loans (APL), namely, APL-A, APL-B and APL-C with a total cost of US\$200 million for nine (9) West African Countries (APL-A series: Cape Verde, Liberia, Senegal and Sierra Leone; APL-B series: Ghana, Guinea and Guinea Bissau; and APL-C series: Gambia and Mauritania). The APL-A Countries were the first to commence operation in April, 2010. The Liberia WARFP is funded by the World Bank with a total envelop of US\$14 million raised from grants under WB/IDA (US\$9 million) and GEF (US\$3 M) being disbursed over an initial first phase of 5 years, and the Africa Catalytic Growth fund (US\$2.00).

The Project is aimed at strengthening Liberia's capacity to govern and manage targeted fisheries, reduce illegal fishing and improve value addition to local fish products. The WARFP has four (4) key components consisting of: a) Good governance and sustainable management of the fisheries; b) Reduction of illegal fishing; c) Increasing the contribution of the marine fish resources to the local economies; and d) Coordination, monitoring and evaluation and program management.

2.4.7.1 Achievements of the WARFP Project

- Draft fisheries and aquaculture policy ,and Executive summary prepared;
- Capacity building of BNF and MOA staff, including 1 with a Master's Degree in Admiralty Law from the Tulane University Law School, and 4 with certificates in Project Planning and Management, Administration and Management, and Report Writing, respectively, from the Ghana Institute of Management and Public Administration;
- Contracts awarded to Phoenicia Architecture Company and Top International Engineering Ltd. for construction of the Robertsport Fish Landing Site Cluster, Community Fisheries Center and Kru Town Cold Store. Construction of the Landing site was about 30% completed by the end of 2014, as a result of the slow pace of work due to the EVD;
- Studio Speri, an International marine engineering firm was recruited to design the Mesurado fishing pier;
- Bathymetric, Topographic and Geotechnical studies were done at the Mesurado pier vicinity to provide baseline information for the design activity;
- Designs, specifications and BoQs were prepared for the Mesurado pier facility, and bidding documents were prepared;

- Design and tender documents were also prepared for the Bureau of National Fisheries prefabricated office. Bidding process was concluded and contract negotiated with the most responsive bidder, Twin Business Group;
- To curb IUU fishing, the project facilitated, along with the Liberia Coast Guard (LCG) and UNMIL, the conduct of:
 - 17 sea patrols and 10 river patrols (with LCG);
 - 13 maritime air patrols (with UNMIL);
 - 33% of construction of the Harper Coastal Station was completed by December 2014.

2.4.7.2 Constraints of the WARFP Project

- Ebola outbreak delayed construction activities for fisheries infrastructure. The Chinese contractor has not resumed construction activities at the fish landing site up this report.
- There were constant delays in receiving no objections to proceed with project implementation activities.

2.4.8 Central Agricultural Research Institute

The Central Agricultural Research Institute (CARI) is the only National Research Institute in Liberia. It is located in Suakoko, Bong County. The Central Agricultural Research Institute (CARI) continues to conduct applied and adoptive research on problems that effect agricultural production. Currently, CARI operates seven (7) research programs. These programs are Special Project, Natural Resource Management, Value Addition/Post Harvest, Livestock, Outstation Trial/Seed Multiplication, Tree Crop and Bio-Technology (Tissue Culture).

2.4.8.1 Achievements of Central Agricultural Research Institute

CARI Autonomous Status

An Act to establish Central Agricultural Research Institute (CARI) as an autonomous public agriculture research institute was passed by the National Legislature. This Act replaces the August 1980 Government Decree/Ordinance which dissolved the Central Agricultural Experimental Station and granted a semi-autonomous institute status to CARI.

CARI Strategic Master Plan

A ten-year agriculture Research Strategic Master Plan was developed for CARI. The Strategic Master Plan is aimed at providing a framework for the revitalization of the agriculture sector by the National Research Institute. It therefore clearly sets the direction, new organization structure, research priorities and time frame for research, capacity development, and related activities.

Staff Capacity Development

CARI's human resource capacity is gradually improving with the return of many of the young scientists who have been supported to pursue advanced training at various universities around the world. Currently CARI has 15 staffs studying for their Masters and PhD Degrees (11 MSc.

& 4 PhD) in various Universities around the world, while 17 staffs are studying for their Bachelor Degrees in local Universities.

Employment Status: There are 445 employees of CARI, 67% (296) of which are males and 33% (149) are females. At the specialist levels, there are 14 scientists including 2 PhD holders and 12 MSc holders engaged in strategic research activities.

Finance: CARI is funded by the government of the Republic of Liberia through the Ministry of Agriculture. Additional sources of funding were provided by International Development partners. Major funding received during the period included a) World Bank through the West Africa Agricultural Productivity Project (WAAPP), ADRA and b) the Japanese Emergency Rice Initiative (JERI) through AfricaRice.

Rice Program

- CARI is promoting 12 lowland and upland rice varieties for use by Liberian rice farmers. There are 141.475 mt of improved lowland and upland seed rice available in the Seed Bank at CARI.
- CARI is collaborating with WAAPP to produce 500 mt of improved lowland and upland seed rice to make them available to farmers in a timely manner. Through this collaboration, CARI produced 166.9 mt of seed rice at its production sites on CARI and Kpatawee on 70 ha of lowland. The Institute successfully distributed over 221.539 mt seed rice to farmers. The major rice varieties multiplied include NERICA L-19, NERICA L-14, Suacoco-8 and BR-11.
- CARI, through partnership arrangement with AfricaRice, conducted an Initial Yield Trial (IYT) at “101 site” involving 93 varieties out of which 15 varieties were selected based on their high yielding ability, as well as disease and pest resistance.
- Other achievements include the Certification of 29 technicians in Seed Inspection and certification, the development of a Seed Certification and Quality Assurance Training Manual; and training of 30 participants in the use of a Seed Certification and Quality Assurance Manual.

Root and Tuber Program

- With collaboration and support from WAAPP, CARI implemented rapid multiplication of 10 promising Improved Cassava varieties on 25 hectares.
- Also during the year, CARI distributed 5,000 bundles of improved cassava planting materials to 7 Farm Organizations in 4 Counties (Bong, Gbarpolu, Margibi, and Bomi); and
- Established four (4) multi-location trail sites; and conducted four (4) radio talk shows to create awareness on Quality Root and Tuber Production activities and progress in Liberia.

Maize/Vegetable Program

- Produced foundation seed of corn on 0.4 hectare and supported the establishment of 5 hectares in Kpatawee for the production of Breeder/Foundation corn seed;
- CARI harvested about 200kg of breeder seeds with 800 kg of foundation seeds of SYN 22 Open Pollinated Corn Varieties (OPV) from Kpatawee. The foundation seeds were sold to out-growers or seed companies for multiplication while the breeder seeds are used to establish new trial fields. CARI commenced the screening of 4 OPV and data collection to evaluate

growth dynamics and resistance to rust and blight disease. The OPV include SYN 22, Obantampa, Synior, and SUWAN;

- Among several, two leguminous crops (cowpeas and soybeans) are being evaluated and germination is steadily progressing. The screening of several leguminous crops and agronomic categorization is in progress at CARI;
- Additionally, the Maize/Vegetable Program has built the capacities of agricultural personnel and small-scale farmers in Bong County in view of increasing their yield and income; and
- The screening of several leguminous crops and agronomic categorization is in progress at CARI.

Biotechnology Program

In the year under review, the Biotechnology Program achieved the followings:

- produced 210,000 improved cassava seedlings in the field and screen-houses using rapid multiplication techniques;
- established one (1) hectare of land with four (4) varieties of yellow root cassava for characterization;
- 20,000 cassava seedlings of six varieties in screen-house from cuttings obtained from Nigeria by IITA/FED and
- Received approval from WAAPP Project for the construction a biotechnology laboratory at CARI.

Tree Crops Program

- Distributed 3,000 improved and elite cocoa (*Theobroma cacao*) seedlings to farmers;
- Distributed and supervised the planting of 500 seedlings of improved *Carica papaya* seedlings to 15 schools in Bong County;
- Propagated 200 cocoa seedlings clonally; established 2.5 ha / 6.177 acres of land races plantain and banana orchards;
- Constructed permanent nursery site for tree crops propagation purposes; and expanded citrus and guava orchards from 1ha / 2.47 acres to 3ha / 7.412 acres.

Fisheries Program

- Rehabilitated three (3) production ponds and stocked them with two breeds of fish for research and multiplication of fingerlings; and
- Additional three ponds were rehabilitated to serve as reservoirs and to supply water to the rice field during the dry season.

Livestock Program

- Reactivated the Swine, Small Ruminants (goats and sheep) and Beef cattle Unit. The Unit is stocked with 56 pigs 7 of which are breeder pigs; 12 African dwarf goats, and 30 local breed goats; 5 sheep; and 43 beef cattle, 9 of which are heifers;
- Exercises involving de-worming and spraying of external parasites for small and large ruminants were conducted during the year.
- With support from the USAID-funded FED Project, constructed a goat quarantine facility and turned it over to CARI.
- Land 'O' Lake constructed a sick animal isolated shelter and turned it over to CARI

- Monitored and quarantined 209 goats for 4 weeks before distribution by Land ‘O’ Lake to local goat farmers in Bong and Nimba Counties;
- Purchased additional beef cattle, goats and pigs to increase the herd; and
- Initiated applied research activities on exotic and native pigs and their crosses aimed at investigating their reproductive performances using locally available feed ingredients.

Post-Harvest and Value Addition Program

- Harvested 27.65 mt of seed rice from demonstration sites at CARI and Kpatawee; and
- Processed 5.5 mt of high yielding cassava into other useable forms (33.5 bags of gari, 40kg of fufu powder, 44 kg of cassava flour and 32.5 kg cassava starch).

Engineering and Maintenance

- Performed activities including general servicing of vehicles and equipment/machines (vehicles, motorcycles, generators, tractors, etc.); timely provision of transportation and construction of agricultural structures where and when necessary;
- Carried out land preparation for crops production; and
- Facilitated the conduct of training workshops related to Agricultural Engineering

2.4.8 The South-South Cooperation Program

The South-South Cooperation (SSC) Program was a two-year Technical Assistance (TA) program that began in June 2012, and coordinated through the UN. The program was a tripartite arrangement to deliver Technical Assistance in Liberia with the Government of Liberia (GOL) as the implementing partner; the Government of the People’s Republic of China (GOC) as sponsor; and the United Nations, through the FAO. The SSC was a skill-transfer/capacity enhancement program that was geared towards technology transfer in agriculture production and food security. The capacity of Liberian counterparts and farmers were built in various production and post-harvest activities involving crops, fisheries and livestock. During the program implementation, a team of Chinese farmers comprising five (5) experts and nineteen (19) technicians were matched with thirty-eight (38) young Liberians, forming a Team that was headed by an expert at five sites -- Bomi County (Klay), Montserrado County (Center Songhai), Grand Cape Mount County (Measuagoon) and Bong County (CARI and Tumutu). Beside the young Liberian counterparts, one (1) National Coordinator was assigned to the Chinese. The young Liberian counterparts are graduates from universities/colleges and vocational training institutions in Liberia.

2.4.8.1 Achievements

- SSC Team visited 769 farming households and 13 large farms and collected baseline information on local agricultural development, available technology, market needs and labor force situation;
- At the end of the 2 years, the Chinese SSC team trained the 38 Liberian counterparts and 1,395 farmers and technicians in various aspects of agriculture, including crop production (rice, vegetables, root & tuber seed nursery operations, seedling production, field planting, seed multiplication and harvesting); integrated pest management (control of diseases and insects); farm mechanization (operation and maintenance of small-size power tiller); livestock production; water management and fish farming.
- Developed a total of 69 kinds of training materials and held more than 120 training sessions ,

along with 135 on-farm practical training;

Introduced at the 5 duty stations, twenty-one demonstrations, including non-tray rice seedling rising in dry-bed nursery with parachute transplanting; selection of vegetable varieties and high-yield vegetable cultivation technology; and high-yield maize cultivation technology;

- Organized the Liberian counterparts to implement 21 micro-projects (in various enterprises such as cattle, goats, rabbits and poultry);
- Introduced and transferred 92 appropriate and effective technologies
- Carried out 24 pilot demonstrations;
- laid out high standard rice and vegetables production sites; and
- trained more than 300 poultry farmers in Lofa County (all women) in poultry production, management and marketing;