

**FINAL DRAFT**



**REPUBLIC OF GHANA**

**PILOT PROGRAM BASED BUDGET (PBB)**

**FOR 2013-2015**

**MINISTRY OF FOOD AND AGRICULTURE**

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# **PART A: STRATEGIC OVERVIEW OF THE MINISTRY OF FOOD AND AGRICULTURE**

## **1. GSGDA Policy Objectives**

**The GSGDA contains eight (8) Policy Objectives that are relevant to the Ministry of Food and Agriculture.**

**These are as follows:**

- Improve Agricultural productivity
- Increase agricultural competitiveness and enhance integration into domestic and international market
- Reduce production and distribution risks/bottlenecks in Agriculture and industry
- Promote selected crop development for food security, export and industry
- Promote livestock and poultry development for food security and income
- Promote fisheries development for food security and income
- Improve institutional coordination for agriculture development
- Promote the application of Science, Technology and Innovation in all sectors of the economy

## **2. Mission**

Ministry of Food and Agriculture exists to promote sustainable agriculture and thriving agribusiness through research and technology development, effective extension and other support services to farmers, processors and traders for improved livelihood.

### **3. Core Functions**

**The core functions of the Ministry of Food and Agriculture are to:**

- Plan and advise the Government on agricultural development policies, administration and management of the agricultural sector of Ghana's economy
- Monitor and evaluate the total agricultural sector with emphasis on Crops, livestock, fisheries, irrigation and mechanization of agricultural industry
- Implement and / or supervise Agricultural programs and projects
- Coordinate Agricultural research

### **4. Strategic Policy Objectives**

**The MDA has adopted the following strategic policy objectives to guide its efforts to fulfill the national policy objectives:**

- Food security and emergency preparedness
- Increased Growth in Incomes
- Increased Competiveness and enhanced integration into domestic and international markets
- Sustainable Management of land and Environment
- Science and Technology Applied in Food and Agricultural Development
- Improved Institutional coordination

## 5. Policy Outcome Indicators and Targets

Outcome Indicator Description	Unit of Measurement	Baseline		Latest status		Target	
		Year	Value	Year	Value	Year	Value
Percentage change in output/yield per unit area							
- Maize	Metric Tons (Mt) produced per Hectare (Ha)	2010	1.7	2012	2.21	2013	2.38
- Rice (milled)		2010	2.41	2012	3.13	2013	3.37
- Cassava		2010	13.84	2012	19.99	2013	19.39
- Yam		2010	15.26	2012	15.72	2013	15.87
- Plantain		2010	6.74	2012	6.94	2013	7.01
Percentage change of volume of production							
- Maize	Total volume of all agricultural produce including crops, livestock, fisheries etc expressed as a percentage (MT)	2010	11.19	2012	13.22	2013	14.24
- Rice(milled)		2010	-	2012	-	2013	-
- Cassava		2010	32.62	2012	38.55	2013	41.51
- Yam		2010	8.81	2012	10.41	2013	11.21
- Plantain		2010	18.22	2012	18.58	2013	18.76
- Poultry		2010	-	2012	-	2013	-
- Sheep		2010	9.15	2012	9.86	2013	10.21
- Goat		2010	3.36	2012	3.68	2013	3.84
- Cattle		2010	5.25	2012	5.75	2013	5.99

Percentage Change in Post-Harvest Losses:								
-	Maize	Percentage	2010	31.59	2012	24.57	2013	21.06
-	Cassava		2010	31.14	2012	24.22	2013	20.78
-	Rice		2010	6.21	2012	4.83	2013	4.14
-	Yam		2010	21.96	2012	17.08	2013	14.64
Total volume and value of Agricultural Commodities Exported								
Pawpaw Volume =( 891,903Kgs in 2009)	Metric Tons	2010	812,533	2012	904,610	2013	970,550	
Value =(US\$545,600 in 2009)		2010	971,113	2012	1,025,760	2013	1,236,400	
Mango Volume = (434,873Kgs in 2009)		2010	291,130	2012	320,425	2013	335,830	
Value =(US\$234,950 in 2009)		2010	230,431	2012	270,520	2013	290,350	
Pineapple Volume = (31,566,665Kgs in 2009)		2010	40,141,400	2012	43,256,180	2013	46,780,145	
Value =(US\$10,628,200 in 2009)		2010	13,554,621	2012	14,870,425	2013	15,250,280	
Banana Volume = (47,613,058Kgs in 2009)		2010	64,201,795	2012	66,420,215	2013	69,334,160	
Value =(US\$11,589,500 in 2009)		2010	15,532,998	2012	16,815,110	2013	18,250,320	

Tonnage of Shea Butter exported annually	Metric Tons	2010	41,219.2	-	96,200	-	98,650
Crops and Livestock contribution to the GDP	Percentage	2010	21.53	-	21.94	-	22.67
Fishery contribution to Ghanaian protein intake	The per capita consumption of fish	2010	22.0	2012	24.5	2013	22.0
Total fish supply							
Marine	Total fish supply (in metric tonnes) from marine, inland capture, harvesting and imports	2010	319,421	2012	325,006	2013	324,611
Inland Capture fisheries		2010	74,500	2012	74,500	2013	74,500
Harvesting of ponds/ cages/dams/dugouts		2010	12,200	2012	15,500	2013	16,250
Total domestic production		2010	406,121	2012	415,006	2013	415,361
Import		2010	199,798	2012	190,000	2013	185,000
Quantity of fish produced per hectare of pond per year	The ratio of total fish supply (in metric tonnes) produced from fish ponds to total hectare of ponds, expressed in percentage	2010	1.5	2012	-	2013	-

## 6. MDA Summary – Expenditure Estimates by Budget Program, Economic Classification and Projects

Expenditure By Budget Program	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				<b>GHC</b>	<b>GHC</b>	<b>GHC</b>
BP1 Management and Administration				86,584,971	87,038,735	87,520,014
BP2 Food Security and Emergency Preparedness				220,128,992	219,559,032	221,149,632
BP3 Increased Growth in Incomes				7,625,869	7,616,069	7,591,230
BP4 Marketing of Agricultural Products				6,200,000	6,200,000	6,262,000
BP5 Management of Land and Environment				357,960	14,680	14,827
BP6 Science and Technology in Food and Agricultural Development				1,550,330	1,550,330	1,565,833
<b>Total Expenditure</b>				<b>322,448,122</b>	<b>321,978,846</b>	<b>324,103,536</b>
Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				<b>GHC</b>	<b>GHC</b>	<b>GHC</b>
<b>Current Expenditure</b>						
21 Compensation of Employees				38,433,515	38,910,829	38,910,829
22 Use of Goods and Services				35,822,741	35,677,651	35,777,889
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				108,176,081	108,176,081	109,257,842
<b>Capital Expenditure</b>						
31 Non-Financial Assets				140,015,785	139,214,285	140,156,978
<b>Total Expenditure</b>				<b>322,448,122</b>	<b>321,978,846</b>	<b>324,103,538</b>
Expenditure by Program and Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				<b>GHC</b>	<b>GHC</b>	<b>GHC</b>
BP1 Management and Administration				40,562,116	40,562,116	40,967,737
BP2 Food Security and Emergency Preparedness				90,783,669	90,292,169	90,745,641
BP3 Increased Growth in Incomes				2,160,000	2,160,000	2,181,600



BP4 Marketing of Agricultural Products				6,000,000	6,000,000	6,060,000
BP5 Management of Land and Environment				310,000	-	-
BP6 Science and Technology in Food and Agricultural Development				200,000	200,000	202,000
<b>Total Expenditure</b>				<b>140,015,785</b>	<b>139,214,285</b>	<b>140,156,978</b>

## **PART B: BUDGET PROGRAM SUMMARY**

### **PROGRAM 1: Management and Administration**

#### **1. Budget Program Objectives**

- To Improve institutional coordination within MOFA and other relevant Agencies (Private Sector, Civil Society, DPs, MDAs)
- To strengthen institutions within the Ministry
- To strengthen policy, planning, monitoring and evaluation within the Ministry

#### **2. Budget Program Description**

The Management and Administration program provides all of the cross-cutting services required in order that the other programs can succeed in achieving their objectives. The program is responsible for:

- Setting the MDA's policy direction. This involves the Office of the Chief Director, Legal and General Research Units.
- Managing human resource, budget, finance, central procurement, stores and logistics, ICT services, public relations, organizational development and corporate training.

### 3. Budget Program Summary : Expenditure by Sub-Program, Economic Classification

#### Program 1: Management and Administration

Expenditure By Budget Sub-Program	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
BSP1 General Administration				59,456,413	59,910,177	60,120,170
BSP2 Finance				25,250,000	25,250,000	25,502,500
BSP3 Human Resource				976,558	976,558	986,324.00
BSP4 Policy, Planning, Budgeting, Monitoring and Evaluation				702,000	702,000	709,020.00
BSP5 Research, Statistics, Information and Public Relations				200,000	200,000	202,000.00
<b>Total Expenditure</b>				<b>86,584,971</b>	<b>87,038,735</b>	<b>87,520,014</b>
Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				38,433,515	38,910,829	38,910,829
22 Use of Goods and Services				3,649,758	3,626,208	3,662,471
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				3,939,582	3,939,582	3,978,978
<b>Capital Expenditure</b>						
31 Non-Financial Assets				40,562,116	40,562,116	40,967,737
<b>Total Expenditure</b>				<b>86,584,971</b>	<b>87,038,735</b>	<b>87,520,015</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Provide vehicles (saloon cars - 20, pick-up - 50, etc.) by Dec 2013				8,964,698	8,964,698	9,054,345
Complete the linking of the ministerial block at Head office by Dec 2013				500,000	500,000	505,000
Procure computers and office equipment by Dec 2013				859,206	859,206	867,798

Construction to office accommodation for 28 newly created districts				5,238,212	5,238,212	5,290,594
Procure a modern state of the art rice mill by Dec 2013				10,000,000	10,000,000	10,100,000
Rehabilitate and expand three warehouses by Dec 2013				9,000,000	9,000,000	9,090,000
Procure and maintain priority commodity (maize, rice, soya, etc.) by Dec 2013				6,000,000	6,000,000	6,060,000
<b>Total Expenditure</b>				<b>40,562,116</b>	<b>40,562,116</b>	<b>40,967,737</b>

# **BUDGET SUB-PROGRAM SUMMARY**

## **PROGRAM 1: Management and Administration**

### **SUB-PROGRAM SP1.1: General Administration**

#### **1. Budget Sub-Program Objectives**

- To effectively coordinate the activities of the Ministry and its Agencies
- To ensure the provision of adequate logistics

#### **2. Budget Sub-Program Description**

This sub program looks at the coordination activities of the Ministry and its Agencies through the office of the Chief Director. The main operations are to;

- Issue directives that are consistent with the policy direction of the Ministry
- Provide logistics (e.g. procurement, transport etc.)
- Manage the properties (i.e. Plan and administer the maintenance of properties, manage lease agreements, etc.)

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Agriculture related national and international shows organized	Number of shows organized	5	5	5	5	5	5
Procurement plan prepared	Plan prepared by	31 <sup>st</sup> October	31st October	31st October	31st October	31st October	31st October

### 4. Budget Sub-Program Operations and Projects

**The table lists the main Operations and Projects to be undertaken by the sub-program.**

Operations
Organize meetings, workshops, conferences, and seminars annually
Honour MOFA's international obligations to affiliated bodies such as IFAD, Africa Rice, FAO Desert Locust Control Committee, etc. annually.
Repair and maintain all official structures, vehicles, etc. annually.
Organize Farmers Day, World Food Day, Policy Fairs etc. annually

Projects (Investment)
Purchase of vehicles, plants and equipment

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				38,433,515	38,910,829	38,910,829
22 Use of Goods and Services				1,521,200	1,497,650	1,512,627
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				3,939,582	3,939,582	3,978,978
<b>Capital Expenditure</b>						
31 Non-Financial Assets				15,562,116	15,562,116	15,717,737
<b>Total Expenditure</b>				<b>59,456,413</b>	<b>59,910,177</b>	<b>60,120,171</b>

# BUDGET SUB-PROGRAM SUMMARY

## PROGRAM 1: Management and Administration

### SUB-PROGRAM SP 1.2: Finance

#### 1. Budget Sub-Program Objective

To establish and implement an effective and efficient financial management system within the Ministry.

#### 2. Budget Sub-Program Description

This sub-program seeks to develop an effective electronic framework for financial and asset management for quarterly and annual reporting. It also seeks to train and upgrade accounting staff in financial and asset management.

#### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Asset register reviewed and updated annually	Annual review of asset register	1	1	1	1	1	1
Financial report produced	Quarterly production of financial report	4	4	4	4	4	4
	Annual production of financial report.	1	1	1	1	1	1



#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Organize meetings, workshops, conferences and seminars annually	Procure plants and equipment (generator plant) etc.
Repair and maintain all official structures, vehicles, etc. annually	Procure laptops, desktops, printers, scanners, digital cameras and software for data management etc.
Monitor the implementation of all planned activities annually.	Procure vehicles, furniture, fixtures and fittings etc.

#### 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				250,000	250,000	252,500
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				25,000,000	25,000,000	25,250,000
<b>Total Expenditure</b>				<b>25,250,000</b>	<b>25,250,000</b>	<b>25,502,500</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 1: Management and Administration**

#### **SUB-PROGRAM SP 1.3: Human Resource**

##### **1. Budget Sub-Program Objective**

To improve human resource capacity of all directorates of MOFA and relevant Agencies.

##### **2. Budget Sub-Program Description**

The operations of the sub-program involve recruiting, upgrading and adequately resourcing the HRDM and other directorates to function effectively. It also seeks to build capacity of MOFA, Agricultural-related MDAs and the private sector to enhance agriculture productivity.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Human resource database reviewed and updated quarterly	Number of times updated in a year	4	4	4	4	4	4
Human resource within the ministry, relevant MDAs and other actors along the agricultural value chain developed (trained).							
- In-service training	Number of staff trained	45	50	60	70	80	90
- Local courses		160	150	200	250	300	350
- Foreign training		160	150	200	250	300	350
- Middle level manpower training		259	266	243	451	450	500
- Prospective and practicing farmers vocational training		116	65	50	200	200	250

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Train 50 staff in ICT	Procure laptops, desktops, printers, scanners, digital cameras and software for data management
Train 20 officers in human resource development and management annually	Procure vehicles, furniture, fixtures and fittings
Facilitate vocational training to 200 prospective farmers.	Procure 4 No. 4x4 vehicles
Organize and facilitate in service training (local and foreign) for 365 MoFA staff	
Facilitate modern agricultural training for middle level manpower personnel at the agricultural colleges.	
Collaborate with tertiary institutions on graduate and post graduate training of MOFA staff and undertake curriculum review in line with the sector needs.	
Facilitate post-graduate technical and administrative training for staff at both local and overseas institutions	
Update and review database	
Recruit 300 sex disaggregated staff	
Promote, upgrade and replace staff	
General office administration	
Pay affiliation fees	
Conduct tracer studies and outreach programs to increase enrollment of females into agricultural institutions	
Undertake monitoring, follow ups, and evaluation of MOFA staff, graduates of the farm institutes and colleges.	

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				976,558	976,558	986,324
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>				-	-	-
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>976,558</b>	<b>976,558</b>	<b>986,324</b>

# **BUDGET SUB-PROGRAM SUMMARY**

## **PROGRAM 1: Management and Administration**

### **SUB-PROGRAM SP 1.4: Policy, Planning, Budgeting, Monitoring and Evaluation (PPBME)**

#### **1. Budget Sub-Program Objective**

To improve planning, policy analysis, monitoring and evaluation, data collection and analysis within the Ministry.

#### **2. Budget Sub-Program Description**

This sub-program seeks to strengthen the capacity of MOFA staff {national directorate staff and Regional Agricultural Development Unit (RADU)} in policy planning and analysis, monitoring and evaluation at all levels in the Ministry.

##### **The operations involved are:**

- Planning and development of all policy documents of the Ministry
- Preparing and submission of budget estimates to MoFEP and Parliament
- Reviewing the policies of the Ministry to make them consistent with government overall policy objectives
- Preparing the strategic plan of the Ministry
- Conduct Monitoring and evaluation site visits
- Preparation of the monitoring and evaluation reports

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Annual monitoring and evaluation report produced and disseminated	Annual M&E report produced and disseminated by	31 <sup>st</sup> March	31 <sup>st</sup> March	31 <sup>st</sup> March	31 <sup>st</sup> March	31 <sup>st</sup> March	31 <sup>st</sup> March
MOFA Strategic Plan prepared/ Reviewed	Plan Reviewed/ produced by	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October
Annual budget for MOFA developed	MOFA annual budget prepared	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October	31 <sup>st</sup> October

### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Organize meetings, workshops, conferences and seminars annually
Repair and maintain all official structures, vehicles, etc. annually
Monitor the implementation of all planned activities annually
Organise statutory meetings (steering committee, ASWG, etc.) monthly each year

Projects (Investment)
Procure laptops, desktops, printers, scanners, digital cameras and software for data management
Procure vehicles, furniture, fixtures and fittings

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				702,000	702,000	709,020
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>702,000</b>	<b>702,000</b>	<b>709,020</b>



# **BUDGET SUB-PROGRAM SUMMARY**

## **PROGRAM 1: Management and Administration**

### **SUB-PROGRAM SP 1.5: Research, Statistic, Information, Communication and Public Relations**

#### **1. Budget Sub-Program Objective**

To provide relevant, timely and reliable data for policy formulation and decision making.

#### **2. Budget Sub-Program Description**

The operations of this sub-program are carried out by the Statistics Research and Information Directorate (SRID), Information Communication Technology (ICT) Unit and the Ministry of Food and Agriculture Information Resource Centre (MOFAIR).

**SRID:** Establish and maintain a computer base data bank system for the provision of relevant, timely and reliable agricultural data and train staff in data capturing, analysis, interpretation and information dissemination. It also provides real time statistics for policy formulation, planning, plan implementation monitoring and evaluation at micro, meso and macro levels.

**ICT:** Promote the deployment and exploitation of ICT to support the activities of agriculture sector including the production, processing, marketing, storing and distribution of agricultural products and services. In addition, through MoFA Website and intranet; real time and reliable data and information would be disseminated country-wide and globally to enhance inter and intra linkages among stakeholders e.g. MDAs, Development Partners etc. Equip MoFA with state-of-the-art standard in usage of software and hardware.

#### **The operations involved are:**

- Updating of MoFA Website daily
- MOFA staff ICT skills upgraded (Capacity building)
- MoFA E-mail services updated
- Preventive maintenance carried out on ICT gadgets bi-annually
- Repair works carried out on ICT gadgets daily
- Promote intra and inter linkages (MDAs, DPs)
- E-Agriculture services established (ICT infrastructure)

**MOFAIR:** It seeks to strengthen the convergence of agricultural information/knowledge to improve MoFA knowledge sharing and public access and dissemination.

**The operations involved are:**

- Dissemination of information to MOFA staff and the general public
- Make available MoFA's knowledge information bank for easy access and rapid reference
- Management of MoFA's information or knowledge bank through interactive electronic platform
- Upgrade capacity of MoFA staff on information/knowledge management
- Hosting of formal gatherings of MOFA and allied MDAs

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
MOFA website updated daily	Number of days updated	-	365	365	365	365	365
Agricultural Facts and Figures produced and disseminated annually	Number of copies produced and disseminated annually	1	1	1	1	1	1
Technical skills of SRID staff upgraded annually - In service - Local training - Foreign training	Number of staff trained	20	20	25	25	25	25
Intranet established in all directorates	Number established	-	-	5	5	5	5
MOFA staff upgraded in ICT(Capacity building)	Number of staff trained - In-service Training	-	-	250	250	250	250
	- Local Training	-	-	10	10	10	10
	- Foreign Training	-	-	2	2	2	2
MoFA ICT Policy issues disseminated	Number of times disseminated	-	-	1	1	1	1
Monitoring visits undertaken to ensure compliance	Number of visits	-	-	2	2	2	2
MoFA E-mail services updated	Number of times updated	-	-	365	365	365	365
Preventive maintenance carried on ICT equipment	Number of times	-	-	2	2	2	2
ICT/IT Auditing	Number of times	-	-	1	1	1	1

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Organize meetings, workshops, conferences and seminars annually	Procure laptops, desktops, printers, scanners, digital cameras and software for data management
Repair and maintain all official structures, vehicles, etc. annually	Procure vehicles, furniture, fixtures and fittings
Monitor the implementation of all planned activities annually.	

#### 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				200,000	200,000	202,000
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>200,000</b>	<b>200,000</b>	<b>202,000</b>

## BUDGET SUB-PROGRAM SUMMARY

### PROGRAM 1: Management and Administration

#### SUB-PROGRAM SP 1.6: Agricultural Sector Stakeholder Coordination

##### 1. Budget Sub-Program Objective

To strengthen the platform for engagement between MOFA and DPs, Civil Society Organizations, the Private Sector and other MDAs.

##### 2. Budget Sub-Program Description

The role of the sub-program is to plan and facilitate strong engagement between MOFA and DPs, Civil Society Organizations, the Private Sector and other relevant MDAs. The sub-program also maintains liaison between these stakeholder through regular meetings and communication. It monitors current issues and tailors stakeholder meetings to address emerging issues and mitigate risks to the achievement of the MDA's objectives.

The Ministry works closely with each of the programs to identify issues and needs to facilitate appropriate liaison. MOFA will also improve coordination with DPs by institutionalizing joint planning and sector review and formalizing MOFA-DP quarterly meetings.

##### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Joint Sector Review organized	Number of Reports reviewed	1	1	1	1	1	1
Joint planning session organized	Number of joint planning sessions organized	4	4	4	4	4	4

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Organize meetings, workshops, conferences and seminars annually	Procure laptops, desktops, printers, scanners, digital cameras and software for data management
Repair and maintain all official structures, vehicles, etc. annually	Procure vehicles, furniture, fixtures and fittings
Monitor the implementation of all planned activities annually.	

#### 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				-	-	-
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>						

## BUDGET PROGRAM SUMMARY

### PROGRAM 2: Food Security and Emergency Preparedness

#### 1. Budget Program Objectives

- To reduce food and nutrition insecurity through modernized agriculture
- To maintain national strategic stocks for emergencies
- To establish effective early warning systems

#### 2. Budget Program Description

The program for enhancing food security and emergency preparedness will be delivered by a number of sub-programs, namely:

- **Productivity Improvement:** This identifies, updates and disseminates technological packages and assists farmers to stay abreast of good industry practice.
- **Mechanization, Irrigation and Water Management:** This seeks to collaborate with Research Institutions, International Organizations and NGO's to intensify the use of appropriate farm power machinery and technology.
- **Food Storage, Distribution and Improved Nutrition:** This seeks to train and resource District Assembly staff in post-harvest handling technologies so they can train producers, processors and marketers.
- **Diversification of Livelihood Options:** Involves agro processing, Micro and Small Enterprises (MSEs) production of soap and creams from agricultural by-products, special herbs, honey, snail, mushroom and grass-cutter.
- **Early Warning Systems and Emergency Preparedness:** This seeks to identify vulnerable households in disaster prone areas of the country and to construct vulnerability maps to support targeting of food security and emergency preparedness interventions.

### 3. Budget Program Summary : Expenditure by Sub-Program, Economic Classification

#### Program 2: Food Security and Emergency Preparedness

Expenditure By Budget Sub-Program	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
BSP1 Productivity Improvement				132,113,659	131,611,099	132,347,470
BSP2 Mechanization, Irrigation and Water Management				87,641,269	87,593,869	88,469,808
BSP3 Food Storage, Distribution and Improved Nutrition				320,064	300,064	303,065
BSP4 Diversification of Livelihood Options				25,000	25,000	-
BSP5 Early Warning Systems and Emergency Preparedness				29,000	29,000	29,290
<b>Total Expenditure</b>				<b>220,128,992</b>	<b>219,559,032</b>	<b>221,149,633</b>
Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				28,345,323	28,266,863	28,393,992
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				101,000,000	101,000,000	102,010,000
<b>Capital Expenditure</b>						
31 Non-Financial Assets				90,783,669	90,292,169	90,745,641
<b>Total Expenditure</b>				<b>220,128,992</b>	<b>219,559,032</b>	<b>221,149,633</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Print 5000 dissemination materials each for 5 crops by Dec 2013				300,000	300,000	303,000
Procure one laptop and office stationery for the registration of released varieties by Dec 2013				1,500	-	-



Recruit a consultant, organise 3 preparatory workshops and one for the launching of the seed policy by Dec. 2013				10,000	-	-
Procure 5 4x4 pickup vehicles for 5 agricultural station by Dec. 2013				150,000	-	-
Procure 5 tractor and equipment for 5 agricultural station for land prepared by Dec 2013				300,000	-	-
Upgrade small scale R and T Processing, Business and Marketing skills - RTIMP				25,000	25,000	-
Support Roots and Tubers production - RTIMP				240,000	240,000	121,200
Develop arable lands for rice cultivation annually (RSSP)				120,000	120,000	121,200
Procure one 4 x 4 Toyota pickup for the smooth implementation and monitoring of the seed and fertilizer subsidy program				30,000	-	-
Facilitate land development for rice production - RSSP				300,000	300,000	-
Rehabilitate, furnish and provide fence wall of 1No. Jnr staff quarters at Pokuase by Dec. 2015				190,000	190,000	191,900
Procure low capacity and intermediate agriculture machinery/equipment (100 compact tractors, mini vari, etc				900,000	900,000	909,000
Finance the construction of boreholes on farmers fields for dry season gardening by Dec 2013				3,300,000	3,300,000	3,333,000
Procure 3million livestock/pet vaccines and drugs for the livestock sub-sector by Dec 2013				200,000	200,000	202,000
Complete the rehabilitation and furnishing of all veterinary laboratories by Dec. 2013.				3,200,000	3,200,000	3,232,000
Procure 36million doses poultry vaccine by December 2013				264,000	264,000	266,640
Procure 20 Yamaha motorbikes for 10 regional Vet Offices by Dec 2013				70,000	70,000	70,700
Repair and upgrade Veterinary laboratory buildings in Pong-Tamale				500,000	500,000	505,000
Develop rural infrastructure (irrigation, water conservation, roads, etc) by Dec. 2015				2,000,000	2,000,000	2,020,000
Develop rural infrastructure (irrigation, water conservation, roads, etc) by Dec. 2015				1,206,000	1,206,000	1,218,060
Develop the Accra Plains Irrigation Project by 2015				12,000,000	12,000,000	12,120,000
Rehabilitate the Vea irrigation project by Dec. 2013				6,700,000	6,700,000	6,767,000
Rehabilitate three dams at Koori, Zuedem and Tankase in the Upper East Region by Dec 2013				3,000,000	3,000,000	3,030,000

Construct ten dams in the Volta and Greater Accra Regions by Dec 2013				20,000,000	20,000,000	20,200,000
Construct the Mprumem dam by Dec 2013				6,600,000	6,600,000	6,666,000
Rehabilitate the Okyereko irrigation scheme dyke by Dec 2013				1,624,169	1,624,169	1,640,411
Equip four regional offices with survey equipment by Dec 2013				158,000	158,000	159,580
Rehabilitate and equip Ashaiman soil laboratory by 2013				50,000	50,000	50,500
Rehabilitate Keyime dam by Dec 2013				2,000,000	2,000,000	2,020,000
Rehabilitate Akumadan irrigation scheme by Dec 2013				110,000	110,000	111,100
Construct Binare dam by Dec 2015				547,000	547,000	552,470
Desilt ten selected reservoirs by Dec 2014				5,000,000	5,000,000	5,050,000
Equip four regional offices with survey equipment by Dec 2015				158,000	158,000	159,580
Complete additional works on seven existing schemes by Dec 2014				9,410,000	9,410,000	9,504,100
Rehabilitation of 50 breached dams				10,000,000	10,000,000	10,100,000
Rehabilitation of Canals and equipment				120,000	120,000	121,200
<b>Total Expenditure</b>				<b>90,783,669</b>	<b>90,292,169</b>	<b>90,745,641</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 2: Food Security and Emergency Preparedness**

#### **SUB-PROGRAM SP 2.1: Productivity Improvement**

##### **1. Budget Sub-Program Objective**

To increase yields of priority commodities through the use of improved agricultural inputs and Good Agricultural Practices (GAP).

##### **2. Budget Sub-Program Description**

The operations of this sub-program are carried out through the Districts Assemblies.

###### **These are as follows;**

- Identify, update and disseminate technological packages to assist farmers to stay abreast of good industry practice
- Develop and introduce new and improved crop varieties (high yielding, short duration, disease and pest resistant and nutrient-fortified)
- Facilitate farmer access to improve crop varieties and fertilizer
- Develop a more vibrant seed planting materials industry and will advocate for a regional seed/planting material policy under West Africa Agricultural Productivity Program (WAAPP)
- Increase production in targeted products such as poultry (including Guinea Fowl), small ruminants and pigs, and cultured fish

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past			Budget	Projections	
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Increased yields in:							
Maize	Metric Tonnes per Hectare	2.21	2.21	2.21	2.38	2.55	2.27
Rice		3.13	3.13	3.13	3.37	3.61	3.85
Sorghum		0.99	0.99	0.99	1.10	1.21	1.32
Cassava		19.99	19.99	19.99	19.99	19.99	19.99
Yam		15.72	15.72	15.72	15.87	16.02	16.17
Cowpea		0.95	0.95	0.95	0.99	1.08	1.17
Increased Production of:							
Poultry (Including guinea fowl)	Number	33,861	33,861	33,861	35,554	37,332	39,165
Sheep		16,623	16,623	16,623	17,454	18,763	20,550
Pigs		18,039	18,039	18,039	18,745	20,362	22,302
Goats		17,852	17,852	17,852	18,941	20,151	22,070
Increased production of cultured fish	Metric Tonnes	-	17,000	-	19,040	21,324	23,884
Increased water surface area under fish farming	Hectares	27.84	29.23	26,424	29,594.88	33,146.27	38,146.27

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Organize four seminars for fish farmers by December 2013	Construct one fisheries college at Anomabu by Dec.2013
Organize four quarterly management meetings by Dec. 2013	Procure 2.8 million doses of livestock and pet vaccines by Dec. 2013
Organize four aquaculture fora by Dec. 2013	Procure 36million doses of poultry vaccines by Dec. 2013
Organize four study tours of 5-days per tour for fish farmers by Dec. 2013	Procure 10 dell desktop computers for 10 Regional Vet. Offices by Dec. 2013
Organise 13 Committee meetings annually	Procure 20 Yamaha Motorbikes for 10 Regional Offices by Dec. 2013
Organise 26 sub-committee meetings annually	Procure 3 computers and accessories, stationary by Dec 2013
Organise a trans-boundary workshop with Vet surgeons at Northern and Southern Sector	Repair office equipment and official vehicles by Dec. 2013
To produce and disseminate 25 VSD reports to end users annually	Procure two (2) 4x4 Nissan Pickup for VSD head office by Dec. 2013
Organize by-monthly meetings with National stakeholders associations	Procure 20 Coleman boxes for vaccines storage and transportation for 10 Regional Offices by Dec. 2013
Carryout survey on state of slaughter houses and discuss results with stakeholders by Dec 2013	Procure 40 drenching guns for 10 Regional Offices by Dec. 2013
Identify, update and disseminate existing technological packages on improved crop varieties	Procure 100 sets of training materials for post-harvest training
Undertake multi-locational testing of technologies in 50 locations nationwide, Printing manuals of proven technologies by Dec. 2013	Develop two new aquaculture infrastructure by Dec.2013
Organize 8 National Variety Release and Technical Committee meeting in the Southern and Northern Sector by Dec 2013	Rehabilitate three hatcheries by Dec.2013
Develop National Seed Policy in conformity with regional seed and planting material policy under Economic Community of West African Agricultural Policy (ECOWAP) by Dec. 2013.	Rehabilitate six official residential and office buildings by Dec.2013
Develop policies and strategic plans for selected crops (maize, rice, soybean, yam, cassava and horticultural crops) by Dec 2013	Procure aquaculture equipment (20 water test kits, 60 waders, and 20 weighing scales) by Dec 2013
Organize and support commodity working groups for horticultural crops by Dec. 2013.	Procure vaccines, drugs for the livestock subsector
Participate in trade and policy fairs at the Regional and National levels (National farmers' day and 4 policy fairs) annually	Complete the rehabilitation and furnishing of all veterinary laboratories of MoFA by Dec 2013
Build capacity of 1000 cash crop farmers to improve productivity and produce quality horticultural crops by Dec. 2013	Rehabilitate 3 bungalows of MoFA staff
Facilitate activities towards the registration of released crop varieties by 2013.	Rehabilitate and procure equipment (5 tractor) for 5 agricultural stations





# **BUDGET SUB-PROGRAM SUMMARY**

## **PROGRAM 2: Food Security and Emergency Preparedness**

### **SUB-PROGRAM SP 2.2: Mechanization, Irrigation and Water Management**

#### **1. Budget Sub-Program Objectives**

- To provide access to efficient mechanized services along the value chain
- To accelerate the development and management of irrigation schemes.

#### **2. Budget Sub-Program Description**

##### **Mechanization**

The sub-program seeks to collaborate with NGOs to intensify use of animal traction by smallholder men and women farmers operating on fragile soils. It does this by:

- Providing information and advice;
- Working with Farmer Based Organizations (FBO) to promote cooperative ownership of large capacity machinery/equipment;
- Facilitating access to credit facilities;
- Training tractor operators.
- Developing mechanization Centres which would be led by the private sector. Ideally there will be one such centre in each district.
- Preparing investment plans for the centres, identify potential investors, and provide necessary support to investors (credit lines, land, capacity building, and links with farmers groups).

##### **Irrigation and Water Management**

The component of the sub-program identifies, tests feasibility, and plans new irrigation schemes to be built throughout the country.

##### **The main operations involved are;**

- Training of extension workers on irrigation and water management technologies and building their capacity to undertake irrigation extension.
- Building farmer community management schemes by building the capacity of water user associations in agricultural water management and ensuring their understanding of their obligations as major beneficiaries (group formation and benefits, irrigation methods and maintenance, multiple use of water).



### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Increased productivity and intensification of irrigation schemes	Number	0.87	0.98	1.10	1.52	1.74	2.0
Micro irrigation schemes developed	Hectares (ha)	27,702.5	49,027	70,174	91,322	112,469	138,600
Update feasibility studies for large scale schemes	Hectares (ha)	200,000	200,000	300,000	400,000	500,000	500,000
Private sector mechanization centers established in each district	Number of centers established	84	89	116	143	170	197

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Repair and maintain all official structure, vehicles, etc. annually	Develop the Accra Plains Irrigation Project with fish ponds by 2015
Monitor quarterly the implementation of planned activities annually	Rehabilitate the Veve Irrigation Project including fish ponds by Dec 2013
Train 500 machinery/equipment operators/ owners/repairers appropriately annually (Using KNUST and other agricultural institutions)	Rehabilitate 3 dams at Koore, Zuedem and Tankase in the Upper East Region by Dec 2013
Review Agriculture Engineering and Mechanization Policy by Dec. 2013	Construct 10 dams in the Volta and Greater Accra regions including fish ponds by Dec 2013
Provide Technical Services on Irrigation Technology by Dec. 2013	Construct Mprumem dam including fish ponds by Dec 2013
Conduct Feasibility and Review Studies on irrigation development by Dec. 2013	Rehabilitate Okyereko Irrigation Scheme dyke by Dec 2013
Carry out 2 cycles Irrigated crop production activities by Dec. 2013	Equip 4 regional offices with survey equipment by Dec 2013
Develop manuals and flyers of Agricultural engineering technologies by Dec. 2013	Rehabilitate and equip Ashaiman Soil Lab by 2013
Promote groundwater technology for agricultural purposes by Dec. 2013	Rehabilitate Keyime dam by Dec 2013
Fabricate simple farm equipment prototypes by Dec. 2013	Procure low capacity and intermediate agricultural machinery/equipment (100 compact tractors, 100 tipping trailers, 100 rotary tillers, 100 mulchers and 100 disc ploughs) by 2013
Intensify animal traction technology	Finance construction and mechanization of 200 boreholes on farmers' fields for all year round agriculture annually
	Provide 8 vehicles for AESD Head Office (6 pick-ups and 2 cross country vehicles)
	Procure 10 computers and 5 laptops with accessories for AESD Head Office by Dec. 2013
	Rehabilitation canals and equipment at irrigation sites by Dec. 2013
	Procure 8 no. 4 X 4 Pickup Vehicles by Dec. 2013
	Produce 1000 copies of flyer on agricultural engineering technologies by Dec. 2013
	Procure two welding plants, 2 pedestrian drills, 2 chain saws, fabricating materials for two prototypes equipment
	Procure 10 pairs of draft animals and implement for animal traction centres

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				5,964,100	5,916,700	5,975,867
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				81,677,169	81,677,169	82,493,941
<b>Total Expenditure</b>				<b>87,641,269</b>	<b>87,593,869</b>	<b>88,469,808</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 2: Food Security and Emergency Preparedness**

#### **SUB-PROGRAM SP 2.3: Food Storage, Distribution and Improved Nutrition**

##### **1. Budget Sub-Program Objectives**

- To improve advocacy on nutrition education and food fortification.
- To reduce post – harvest losses and improve storage and distribution systems
- To improve food-based nutrition interventions

##### **2. Budget Sub-Program Description**

**The main operations under this sub-program include;**

- Capacity building of relevant stakeholders in better harvesting, transportation and storage methods, introduction of grading methods and linkages between producers and markets.
- Improving advocacy/nutrition education to enhance peoples' knowledge of the importance of optimum nutrition.
- Ensuring food production systems that take into consideration foodstuffs with both macro and micro nutrients and food fortification as an important component of food processing.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Reduction in post-harvest losses along the maize, rice, sorghum, cassava, yam and fish value chains							
Maize	Percentage (%)	33.35	31.6	29.85	28.1	26.35	24.60
Rice		6.42	5.94	5.46	4.98	4.5	4.02
Sorghum		3.67	3.34	3.01	2.68	2.35	2.02
Cassava		32.17	29.74	27.31	24.88	22.45	20.02
Yam		22.37	20.34	18.31	16.28	14.25	12.22
Fish		27.5	25	22.5	20	17.5	15.00
Development of private sector capacity (including FBO's) to store and process (mill and or package) maize, cassava, yam, sorghum and cowpea products annually							
- Stored Grains	Metric tonnes (MT)	50,000	50,000	50,000	50,000	50,000	50,000
- Milled and/or packaged (Maize, Cassava, Yam, Sorghum and Cowpea)		25,000	25,000	25,000	25,000	25,000	25,000

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Repair and maintain all official structure, vehicles, etc. annually	Procure 2 4x4 pickups for office use at WIAD by Dec. 2013
Monitor quarterly the implementation of planned activities annually	Procure office equipment by Dec. 2013
Conduct 4 radio programs on improved nutrition, food safety, value addition and gender issues	Rehabilitate WIAD Laboratory by Dec. 2013
Assess the consumption of protein fortified QPM, OFSP, leafy vegetables, fruits and other foods for dietary diversity by Dec. 2013	Complete farmer demonstration home by Dec. 2013
Develop good operating procedures for cottage level processors (oil and cassava) by Dec. 2013	
Develop educational materials on Nutrition, Food safety, value addition and gender issues by Dec. 2013	
Organise planning and budget workshop by Dec. 2013	
Organise training in Food safety, nutrition, value addition and gender issues for 30 WIAD staff by Dec. 2013	
Compile, analyze and print (draft) indigenous foods from 5 regions and carry out trials on other recipes	
Participate in 6 fairs/ exhibitions (National Farmers Day, NAFAC, WFD, FAGRO and Health Fair) by Dec. 2013	

#### 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				320,064	300,064	303,065
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>320,064</b>	<b>300,064</b>	<b>303,065</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 2: Food Security and Emergency Preparedness**

#### **SUB-PROGRAM SP 2.4: Diversification of Livelihood Options**

##### **1. Budget Sub-Program Objective**

To reduce the vulnerability of the poor by supporting diversification of livelihood options

##### **2. Budget Sub-Program Description**

The Sub-program supports poor subsistence farmers to diversify their production systems and engage in alternative livelihood activities such as agro processing, production of soap and creams from agricultural by-products, special herbs, honey, snail, mushroom, grass-cutter etc.

It also seeks to identify NGOs in microfinance to promote and sustain community based saving and credit schemes.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Provision of support for people falling below extreme poverty line to engage in off-farm livelihood alternatives							
Grass cutter	Number of people supported	400	400	400	400	400	400
Bee Keeping		200	200	200	200	200	200
Cockerel		1500	1500	1500	1500	1500	1500
Soap & Pomade prod		500	500	500	500	500	500
Rabbit		300	300	300	300	300	300

### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Assist household poultry farmers with cockerel
Supply bee hives to 200 farmers in rural communities annually
Train 500 rural folks in soap and pomade production

Projects (Investment)
Procure 200 soap and pomade making equipment
Procure 300 cages each for rabbit and grasscutter production



## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				-	-	-
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				25,000	25,000	-
<b>Total Expenditure</b>				<b>25,000</b>	<b>25,000</b>	-

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 2: Food Security and Emergency Preparedness**

#### **SUB-PROGRAM SP 2.5: Early Warning Systems and Emergency Preparedness**

##### **1. Budget Sub-Program Objective**

To reduce risks associated with natural disasters and disease/pests outbreaks and ensure availability of adequate food stocks

##### **2. Budget Sub-Program Description**

The Sub-Program seeks to establish and coordinate early warning systems to prevent and manage emergencies and expand national strategic stocks to ensure that emergencies are effectively managed.

###### **This is achieved by;**

- Inspecting and certifying all seeds/planting materials
- Assisting household poultry farmers with cockerels
- Establishing livestock demonstration centres for farmers training
- Multiplying Fodder legume seed for farmers

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Reduction in numbers of food insecure (vulnerable) households	Number of households (millions)	1.92	1.8	1.76	1.68	1.60	1.52
National food buffer stock centers established in all regions.	Number of buffer stock centers	3	3	5	7	10	-
Seed/planting material security stock established in all regions	Number of security stock established	3	3	5	7	10	-
The poor/ vulnerable supported to engage in off- farm livelihood alternatives.	Number poor /vulnerable persons supported	12.67	12.79	12.92	13.04	13.17	13.30

### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Organize meetings, workshops, conferences and seminars annually
Repair and maintain all official structure, vehicles, etc. annually
Monitor the implementation of planned activities annually
Inspect and certify all seeds/planting materials by Dec. 2013
Assist household poultry farmers with cockerels by Dec. 2013
Establish livestock demonstration centers for farmers training by Dec. 2013
Multiply Fodder legume seed multiplication by Dec. 2013

Projects (Investment)
Procure 10 4x4 pickups for regional seed inspectors by Dec. 2013

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				29,000	29,000	29,290
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>29,000</b>	<b>29,000</b>	<b>29,290</b>

# **BUDGET PROGRAM SUMMARY**

## **PROGRAM 3: Increased Growth in Incomes**

### **1. Budget Program Objectives**

- To reinforce food security through financial access to food
- To diversify into cash crops and livestock as a business.
- To add value to commodities being produced and develop new products.
- To find market for existing, diversified and new products.
- To promote small holder livestock business enterprises.

### **2. Budget Program Description**

This program addresses the need for enhanced growth in incomes in the agricultural sector through diversification into cash crops and livestock and value addition. The program seeks to enhance incomes through:

- Promotion of cash crop, livestock and fish production for income in all ecological zones principally through: extension services and enhanced access to certified seed stock for cash crops; improved breeding stock and extension services for livestock; and improving the production of fingerlings, support for the building of ponds and extension services for aquaculture.
- Development of pilot value chains for one selected commodity in each agro-ecological zone by: establishing regional core teams for value chain development; Identifying and building capacity; undertake market feasibility studies for value added goods; facilitating linkage to markets for the selected commodities and strengthening FBOs.
- Development of rural infrastructure - including: advocating for the linking of all district capitals to each other with tarred roads; facilitating the establishment of marketing centres; facilitating the development of rural industrial processing of cassava, oil palm, shea nuts, cashew nuts, soybeans, groundnut, livestock and fish.
- Support to Urban and Peri-Urban agriculture. Urban and Peri-Urban Agriculture (UPA) makes a significant contribution to a variety of foods in urban markets. This production is often associated with health risks, and as a result, there are restrictions.

The program seeks to liaise with MMDAs to zone areas within Urban and Peri-Urban areas for agricultural activities; identify owners and potential users of such lands for agricultural purposes and agree on conditions of use; train Peri-Urban producers in good agricultural practices; facilitate tuberculosis and brucellosis screening in the Peri-Urban milk collection areas; and facilitate mass vaccination, endo and ecto-parasitic interventions against the endemic diseases in the Peri-Urban areas.

### 3. Budget Program Summary : Expenditure by Sub-Program, Economic Classification

#### Program 3: Increased Growth in Incomes

Expenditure By Budget Sub-Program	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
BSP1 Promotion of Cash Crop, Livestock and Fish Production				7,614,699	7,604,899	7,579,948
BSP2 Strengthening of FBOs and Out-Grower Schemes				11,170	11,170	11,282
<b>Total Expenditure</b>				<b>7,625,869</b>	<b>7,616,069</b>	<b>7,591,230</b>
Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				2,229,370	2,219,570	2,140,766
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				3,236,499	3,236,499	3,268,864
<b>Capital Expenditure</b>						
31 Non-Financial Assets				2,160,000	2,160,000	2,181,600
<b>Total Expenditure</b>				<b>7,625,869</b>	<b>7,616,069</b>	<b>7,591,230</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Rehabilitate six national livestock stations by Dec 2013				500,000	500,000	505,000
Construct fisheries college at Anomabo by Dec 2015				750,000	750,000	757,500
Develop two aquaculture infrastructure by Dec 2015				910,000	910,000	919,100
<b>Total Expenditure</b>				<b>2,160,000</b>	<b>2,160,000</b>	<b>2,181,600</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 3: Increased Growth in Incomes**

#### **SUB-PROGRAM SP 3.1: Promotion of Cash Crop, Livestock and Fish Production**

##### **1. Budget Sub-Program Objective**

To increase crop, livestock, and fish productivity along the value chain

##### **2. Budget Sub-Program Description**

This sub-program seeks to increase incomes from livestock, cash crop and fish production by the provision of improved production inputs and enhancing value chain development.

###### **It does this by:**

- Providing extension services and enhanced access to certified seed stock for cash crops;
- Providing improved breeding stock and extension services for livestock; and
- Improving the production of fingerlings, support for the building of ponds and cages extension services for aquaculture.
- Promoting improved Urban/Peri-Urban agriculture



### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Improved technology (crops, livestock and fisheries sub-sectors) disseminated to key stakeholders along the value-chain annually	Number of technologies disseminated	20	20	20	20	20	20
Livestock (poultry, sheep, goats, pigs) productivity increased	Percentage increase per annum	5	5	5	5	5	5
Fish production (inland, marine, harvesting of pond/cages/dams & dug outs) increased	Increase Metric Tons Percentage	12	12	12	12	12	12
Post-harvest losses.(maize, cassava, yam, rice) reduced	Percentage loss per annum	10	10	10	10	10	10

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Enhance the development of rural poultry industry	Complete of APD office accommodation
Support farmers with 30,000 cockerels annually	Rehabilitate Ejura, Babile and Nungua farm livestock structures
Develop 40,000 training materials and 20 demonstration centers for livestock extension delivery annually.	Aqua-culture Lab. Equipment and tools
Enhance the development of aqua-culture industry	Vehicles, Desk top/lap top computers, office equipment
Produce and supply improved breeds of 4000 sheep, 2000 goats, 1000 cattle, 1200 pigs, 1000 rabbits and 150 grasscutters from 8 livestock breeding stations to farmers annually.	Complete 1 fish hatchery at Kona annually
Organize 150 meetings, 160 workshops, 24 conferences and 24 seminars annually.	
Organize 1 farmers day and 4 other livestock shows annually.	
Organize 2 meetings to discuss program of work with regional livestock officers and farm managers.	
Develop 5000 training materials and 6 demonstration centers for fisheries extension delivery annually.	
Repair and maintain 35 office structures, 150 vehicles etc. annually.	
Monitor livestock activities quarterly	
Monitor livestock feed quality quarterly	
Monitor fisheries programmes	
Establish cotton secretariat	

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				2,218,200	2,208,400	2,129,484
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				3,236,499	3,236,499	3,268,864
<b>Capital Expenditure</b>						
31 Non-Financial Assets				2,160,000	2,160,000	2,181,600
<b>Total Expenditure</b>				<b>7,614,699</b>	<b>7,604,899</b>	<b>7,579,948</b>

# **BUDGET SUB-PROGRAM SUMMARY**

## **PROGRAM 3: Increased Growth in Incomes**

### **SUB-PROGRAM SP 3.2: Strengthening of FBOs and Out-Grower Schemes**

#### **1. Budget Sub-Program Objective**

To strengthen Farmer Based Organization (FBOs) and out-grower schemes to enhance marketing of agricultural produce.

#### **2. Budget Sub-Program Description**

This sub-program seeks to promote grouping of farmer for easy access to input and output market.

This is done by holding sensitization sessions for farmers to explain the benefits of cooperative efforts, particularly in storage, processing and transporting of produce to markets. Assistance and advice is provided to farmer groups for the establishment of FBOs.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Development of out-grower schemes	Number of schemes developed	5	5	5	5	5	5
FBO capacity building	Number of FBOs trained	50	20	20	20	20	20
Formation of fish farmer associations	Number of associations formed	10	10	10	10	10	10
Community based fisheries management committees	Number of committees formed	10	10	10	10	10	10

### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Train 1500 beneficiaries of cockered project
Distribute 40000 livestock production manuals to farmer groups

Projects (Investment)
Procure desktop computers

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				11,170	11,170	11,282
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				<b>11,170</b>	<b>11,170</b>	<b>11,282</b>

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 3: Increased Growth in Incomes**

#### **SUB-PROGRAM SP 3.3: Rural Infrastructure Development**

##### **1. Budget Sub-Program Objective**

To develop rural infrastructure to improve agricultural production

##### **2. Budget Sub-Program Description**

This sub-program seeks to reduce cost of transportation and post-harvest losses by facilitating the provision of good road network and agro processing industries.

**It does this by:**

- Advocating for the linking of all district capitals to each other with tarred roads;
- Facilitating the establishment of marketing centres; and
- Facilitating the development of rural industrial processing of cassava, oil palm, shea nuts, cashew nuts, soybeans, groundnut, livestock and fish.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Percentage reduction in cost of transportation	Transportation cost in infrastructure improved areas per annum	1	1	1	1	1	1
Increased industrial processing of agricultural produce.							
Cassava	Percentage increase in processed produce per annum	4	4	4	4	4	4
Oil Palm		8	8	8	8	8	8
Shea nut		6	6	6	6	6	6
Groundnut		6	6	6	6	6	6
Soya bean		6	6	6	6	6	6
Cashew		6	6	6	6	6	6
Increase in rural processing of fish.		Percentage	-	2	4	6	8
Increase in rural processing of livestock	Percentage	4	4	4	4	4	4



#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Demonstrate processing of rabbit meat at famers day celebration
Demonstrate processing of yoghurt at famers day celebration

Projects (Investment)

#### 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				-	-	-
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				-	-	-

## **BUDGET SUB-PROGRAM SUMMARY**

### **PROGRAM 3: Increased Growth in Incomes**

#### **SUB-PROGRAM SP 3.4: Urban and Peri - Urban Agricultural Support**

##### **1. Budget Sub-Program Objective**

To enhance the potential of urban and Peri-Urban agriculture as a source of income

##### **2. Budget Sub-Program Description**

This sub-program seeks to facilitate the zoning of lands within Urban and Peri-Urban areas for agriculture activities. To do so requires the management of specific risks that exist in these environments.

###### **The sub-program seeks to:**

- Liaise with MMDAs to zone areas within urban and Peri-Urban areas for agricultural activities;
- Identify owners and potential users of such lands for agricultural purposes and agree on conditions of use;
- Train Peri-Urban producers in good agricultural practices;
- Facilitate tuberculosis and brucellosis screening in the Peri-Urban milk collection areas; and
- Facilitate mass vaccination, endo and ecto-parasitic interventions against the endemic diseases in the Peri-Urban areas.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Peri-Urban Agricultural yields	Percentage increase in yields	4	4	4	4	4	4
Farmers practicing Peri-Urban Agriculture	Percentage increase of farmers	4	4	4	4	4	4
Training of farmers in good Agricultural practices	Percentage increase in number of farmers trained	4	4	4	4	4	4
Vaccination and treatment of animals	Percentage increase in coverage	4	4	4	4	4	4

### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Monitor zoning of areas within Urban and Peri-urban areas for grazing.

Projects (Investment)
No Project

## 5. Budget Sub-Program Summary: Expenditure by Economic Classification

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				-	-	-
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				-	-	-
<b>Total Expenditure</b>				-	-	-

# **BUDGET PROGRAM SUMMARY**

## **PROGRAM 4: Marketing of Agricultural Products**

### **1. Budget Program Objectives**

To formulate policies and legislation to increase competitiveness of agricultural produce/products and enhance their integration into domestic and international markets.

### **2. Budget Program Description**

This program provides the enabling environment to facilitate export trade and increase participation of small to medium holders in the marketing of agricultural commodities locally. It seeks to improve on the existing market infrastructure; grading and standardization systems, market intelligence; and strengthen the capacity of stakeholders along the value chain.

The operations carried out to address the issue of low levels of domestic market penetration by small holder farmers are to:

- Facilitate the linkage of agro-business firms with small holding farmers;
- Facilitate capacity building for farmers in all aspects of commercialisation including market driven production, small holding farmer linkage models, and good agricultural practices (GAPs);
- Design and launch a market promotion programme for import substitution commodities (e.g. rice, chicken, cooking oil);
- Advocate for local supermarkets, hotels and restaurants to work with a smallholder production base
- Enforce anti-dumping regulations.

The operations undertaken to increase exports of non-traditional agricultural commodities by small holder farmers are:

- Facilitating links between small farmers and successful firms with access to assured export markets;
- Designing sustainable programs to support the certification of smallholders for export markets;
- Developing effective processing and packaging systems for crops, livestock and fisheries;
- Developing branding of Ghanaian produce for international markets
- Building capacity and adequately resource relevant stakeholders for international and
- Trade negotiations.

The operations involved in grading and standardization are:

- Developing grading and standardizing systems for commodities that do not have grades and standards;
- Promoting the adopting of grading and standardization systems for all commodities for both domestic and export markets; and
- Enforcing laws and regulating on standards and grading.

There is the need to strengthen the marketing of agricultural commodities within the domestic and international markets in order to improve the income levels of producers. The main challenges to domestic market access include:

- Limited processing facilities and dilapidated market structures;
- Limited access to market information and
- Poor adoption of standardized measures and marketing qualities standards for agricultural commodities.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Marketed output of staple crops by smallholders	Percentage increase in marketed crops	-	-	10	20	50	20
Export of non-traditional commodities by men and women stakeholders	Percentage increase in export	-	-	20	20	50	10
Grading and standardization systems of agricultural commodities ( crops, livestock and fish) made functional and effective	To be completed by	-	-	-	1 <sup>st</sup> Jan	31 <sup>st</sup> Dec	31 <sup>st</sup> Dec
Monitoring of planned activities	Number of reports	4	4	4	4	4	4

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations
Take preparatory measures for calamity pests control by December 2013
Enhance the development of rural poultry industry
Ensure the production and supply of improved breeds of sheep, goat, pigs and fingerlings
Organize meetings workshops , conferences and seminars for effective planning
Monitor the implementation of planned activities
Repair and maintain all official structures, vehicles etc

Projects (Investment)
Procure Agro chemicals, spraying equipment, personal protective clothing, pheromone traps and lures
Purchase supplementary feed and veterinary drugs
Procure Projectors, laptops, printers, photocopiers, weighing scales
Procure breeding stock, fodder banks, veterinary drugs
Purchase Probes, laboratory consumables, testing kits and hormones
Procure publicity materials

## 5. Budget Program Summary : Expenditure by Economic Classification and Projects

### Program 4: Marketing of Agricultural Products

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				200,000	200,000	202,000
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				6,000,000	6,000,000	6,060,000
<b>Total Expenditure</b>				<b>6,200,000</b>	<b>6,200,000</b>	<b>6,262,000</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Promote and develop export marketing infrastructure - EMQAP				6,000,000	6,000,000	6,060,000
<b>Total Expenditure</b>				<b>6,000,000</b>	<b>6,000,000</b>	<b>6,060,000</b>



## **BUDGET PROGRAM SUMMARY**

### **PROGRAM 5: Management of Land and Environment**

#### **1. Budget Program Objectives**

- To promote land management for sustainable agriculture
- To increase the resilience of agricultural production systems against global climate change
- To promote sustainable exploitation of all water bodies

#### **2. Budget Program Description**

The program seeks to facilitate and encourage the implementation of more sustainable land and environment practices in agriculture, to ensure that production continues to grow. It approaches this task by promoting SLEM technologies; creating awareness and building locally based institutional capacity and by setting and monitoring a supporting policy environment.

**The main operations are;**

- Establishing cross-sector SLM coordination mechanisms at all levels including government, DPs, and civil society
- Establishing mechanisms for joint planning and implementation for SLM at the district level
- Enhancing the capacities of private extension service providers in approaches to climate change adaptation and mitigation processes
- Developing and pilot a SLM based farmer-field-school curriculum
- Integrating SLM principles into curriculum of Agriculture Colleges by 2012.
- Developing an effective, efficient and motivating incentive system to support farmers adopting SLEM practices
- Developing policy and regulatory framework for SLEM by generating relevant information and database
- Reviewing by-laws supporting community level SLEM activities
- Establishing, maintaining and integrating natural resource M&E system, including establishing initial baseline data on land degradation, SLEM practices and fisheries management.
- Monitoring, controlling and supervising activities of all water bodies
- Monitoring the effectiveness of SLEM mitigation program

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2009	2010	2011	Budget Year 2012	Indicative Year 2013	Indicative Year 2014
Policies, laws and regulations reviewed	Number of reviews per year	4	4	4	4	4	4
Patrols undertaken on water bodies	Patrols (hours per week)	60	72	520	520	520	520
Monitoring visits undertaken to ensure compliance (per district)	Number per District per year	4	4	4	4	4	4
Bushfire control	Number of major outbreaks controlled	37	25	15	10	5	5
Area under conservation (protected areas)	Hectares	37,463	37,463	37,463	37,463	37,463	37,463
Participatory land use and fisheries management plans developed at all levels	No of plans developed	5	5	5	5	5	5
Agricultural colleges with SLEM integration into curriculum	Number of agricultural colleges	-	10	10	10	10	10
Training and Awareness programs on SLEM	Number of extension service providers trained annually	15	20	30	40	40	40
	Number of awareness programs organized (per district/year)	-	-	4	4	4	4
Rate of adoption on SLEM practices (percentages)	Number of surveys conducted every two years	-	-	-	1	-	1
Adoption of climate change mitigation measures mainstreamed into agricultural programmes	Number of DADUs with mitigation measures mainstreamed	-	-	-	70	70	80
Establish an incentive system (grants and scheme) for SLEM service providers and adopters	Number of service providers/beneficiaries covered per district	-	-	-	70	70	80

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Collaborate with agricultural colleges and relevant institutions to develop FFS curriculum for SLM	Procure 10 computers, 100 sets of training materials, print 1000 copies of curriculum, consultant fee.
Organize educational campaigns for stakeholders on fisheries law and regulations	Procure publicity equipment ( 10 projectors, 10 public address system)
Organize training on climate change for regional/district environmental desk officers	Procure 10 climate/meteorological monitoring kits, 100 sets training materials, 50 GPS device
Organize training for tractor/machinery operators on implement - soil relationship, water conservation practices, soil moisture control	Procure 10 farm machinery, 100 sets of training materials, 10 bund formers, 100 soil testing kits
Collaborate with relevant institutions (MLF & MEST) to review and update land and water conservation policies	Procure 10 computers and accessories, print 1000 copies of policy documents
Conduct oceanographic and biological studies and stock assessment of water bodies	Procure chemicals, reagents and equipment for 10 laboratories , 100 fish probes, 100 salinometers
Collect and analyze fisheries statistics	Procure 5 computers and accessories, 5 vehicles
Prepare and implement soil, water conservation and fisheries plans at all levels	Fees for 2 consultants ( 1 for fisheries and 1 for land & water)
Assess the impact of irrigation on soils on irrigation schemes (physical, chemical and productivity)	Procure 100 sets of soil testing kits
Monitoring, control and surveillance of all water bodies	Procure 2 patrol vessels and 5 surveillance equipment (VMS, satellite, infra-red tracking device)
Monitoring of effectiveness of bush fire control programmes at community levels	Procure 10 vehicles and 10 office equipment (computers, photocopiers)
Facilitate the enforcement of by-laws to support community level SLM activity	Procure 5 vehicles, 10 computers and accessories

## 5. Budget Program Summary: Expenditure by Economic Classification and Projects

### Program 5: Management of Land and Environment

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				47,960	14,680	14,827
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				310,000	-	-
<b>Total Expenditure</b>				<b>357,960</b>	<b>14,680</b>	<b>14,827</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Procure 10 climate/meteorological monitoring kits, 100 sets training materials, 50 GPS devices				10,000	-	-
Procure 10 Toyota pickup vehicles and office equipment (computer and photocopiers)				300,000	-	-
<b>Total Expenditure</b>				<b>310,000</b>	<b>-</b>	<b>-</b>

## BUDGET PROGRAM SUMMARY

### PROGRAM 6: Science and Technology in Food and Agricultural Development

#### 1. Budget Program Objectives

To promote research and development to enhance the adoption of agricultural technologies by men and women along the value chain

#### 2. Budget Program Description

This program seeks to facilitate improved uptake of new technologies by; improving research effort; building capacity for technology research and application; enhancing access to research information and findings; and developing sustainable funding mechanisms for agricultural research.

The approach taken by the program in each of these areas is detailed below.

**Improve participatory research** – it is important that all potential beneficiaries of research have a voice in research planning. The program seeks to achieve the following:

- Identify and maintain a register of all key stakeholders in the agriculture value chain (database)
- Involve stakeholders (value chain mode) in Research Extension Liaison Committee (RELC) planning sessions, farmer field fora, adaptive trials and other research based events including consultative fora on laws and regulations relating to biotechnology.
- Facilitate the intensification of field demonstrations, farmer field schools, field days/study tours to encourage the adoption of improved technologies.
- Strengthen the veterinary laboratories in Accra and Pong Tamale to conduct research into the production of bivalent New Castle Disease (NCD) and Fowl Pox vaccine in order to improve rural poultry production.

**Build capacity of stakeholders** – This is to enhance technology transfer and adoption along the value chain.

The program seeks to achieve this through the following:

- Conduct or facilitate adaptive trials, farmer field fora, Durbars and exhibitions focused on sector stakeholders;

- Organize consultative forums for producers and processors to review best practices and new technologies and to build the capacity of field officers, producers, processors and other stakeholders in the use of new technologies;
- Conduct on-farm research on low cost, appropriate technologies and develop/deliver these technologies as packages
- Research into improved crop varieties and breeding stock (livestock, fisheries) and feedstuffs.
- Develop new food products and equipment.

**Enhance access to agricultural research information** – the program will facilitate wider access to research information by:

- Organizing Research Extension Liaison Committee (RELC) planning sessions for stakeholders along the value chain at the regional and district levels. .
- Implementing plans for researchable farmer’s constraint, extension and training program.
- Repackaging of existing technologies and disseminate to various stakeholders along the value chain.
- Printing and launching RELC guidelines.
- Establishing and operating a modernized (ICT-based) agricultural library.
- Assessing the biotechnology research potential of the country's research system.
- Conducting an Information Education Campaign (IEC) on biotechnology application.

**Develop a sustainable funding mechanism for Agricultural research** – funding research is always difficult to access on a consistent and sustainable basis. The program seeks to address this issue by:

- Dialoguing with DPs and Ministry of Finance and Economic Planning to agree on appropriate funding mechanisms for agricultural research
- Facilitating dialogue with private sector to fund agricultural research;
- Organizing consultative meetings with research stakeholders to review and promote best practices; and
- Facilitating the establishment of an Agricultural Research Development and Dissemination Fund.

### 3. Budget Sub-Program Results Statement

The table indicates the main outputs, its indicators and projections by which the Ministry measures the performance of this sub-program. The past data indicates actual performance whilst the projections are the Ministry's estimate of future performance.

Main Outputs	Output Indicator	Past Years			Projections		
		2010	2011	2012	Budget Year 2013	Indicative Year 2014	Indicative Year 2015
Adoption of improved technologies along the value chain	Rate of adoption by farmers	-	-	10%	10%	5%	5%
Laws and regulations to enhance the application of biotechnology in Agriculture established	Number of laws and regulations passed	-	-	-	1	1	1
Agricultural technologies developed increased	Number of Agricultural technologies developed	-	-	13	17	20	25
Adoption of improved technologies along the value chain increased	Extension officer farmer ratio	1:1000	1:800	1:700	1:600	1:500	1:500

#### 4. Budget Sub-Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the sub-program.

Operations	Projects (Investment)
Contact all agricultural research outfits in the country for information of on-going research and completed research and link them with others for purpose of sharing information	Rehabilitate DAES video suite by 2013
Build capacity of field officers and farmers on new technologies	Rehabilitate 2 semi-detached bungalows at Pokuase by 2013
Monitoring and Evaluation of extension service delivery in the regions and districts	Procure 4 4x4 utility pickups by 2013
Build staff capacity on extension management , communication and new emerging issues in agricultural development	Procure research equipment for MOFA-Vet laboratories
Sustain awareness creation on prescribed grades and standards for priority commodities with GSB	Procure 2 Cross country vehicles by 2013
Strengthen FBOs to serve as input dealers	Installation of chemical fertilizer plant by 2013
Management meetings	
Repair and maintenance of ISU machines and equipment.	
Repair and maintenance of official vehicles, office equipment	
Intensify the use of mass communication systems and electronic media for extension delivery (Radio, TV, Audio visual vans and e-extension)	
Develop Radio Programs	
Translate technical packages and information into 3 major local languages as new technologies are generated	
Produce and telecast video documentary on 3 priority commodities	
Participate in Agric. Shows and National	
Farmers' Day celebration/Policy Fair	
Develop strategy on Extension in Urban and Peri-Urban Agriculture	



Disseminate information with the use of the audio-visual vans, e-extension and radio in the regions
Facilitate the establishment of agricultural research and dissemination fund
Complete feasibility study on Ghana-India joint venture fertilizer project


## 5. Budget Program Summary : Expenditure by Economic Classification and Projects

### Program 6: Science and Technology in Food and Agricultural Development

Expenditure by Economic Classification	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
<b>Current Expenditure</b>						
21 Compensation of Employees				-	-	-
22 Use of Goods and Services				1,350,330	1,350,330	1,363,833
25 Subsidies				-	-	-
26 Grants				-	-	-
27 Social Benefits				-	-	-
28 Other Expenses				-	-	-
<b>Capital Expenditure</b>						
31 Non-Financial Assets				200,000	200,000	202,000
<b>Total Expenditure</b>				<b>1,550,330</b>	<b>1,550,330</b>	<b>1,565,833</b>
Expenditure by Projects	2011	2012		2013	2014	2015
	Actual	Budget	Est. Outturn	Budget	Indicative	Indicative
				GHC	GHC	GHC
Repair equipment at Information Support Unit by Dec 2013				200,000	200,000	202,000
<b>Total Expenditure</b>				<b>200,000</b>	<b>200,000</b>	<b>202,000</b>

## **PART C: FINANCIAL INFORMATION**

### **Annexure 1: Summary of Expenditure by Program, Economic Classification and Funding Source**

**Annexure 2: Expenditure by Program and Sub Program**

**Annexure 3: Expenditure by Project and Program**

**Annexure 4: Expenditure by Funding and Program**

## **Annexure 5: Expenditure by Program/Sub-Program and Economic Classification**