



REPUBLIC OF GHANA

**MEDIUM TERM EXPENDITURE FRAMEWORK
(MTEF)
FOR 2016-2018**

**PROGRAMME BASED BUDGET ESTIMATES
FOR 2016**

**MINISTRY OF FOOD AND AGRICULTURE
(MOFA)**

The MOFA MTEF PBB Estimates for 2016 is available on the internet at: www.mofep.gov.gh

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

1. GSGDA II POLICY OBJECTIVES

The GSGDA II contains fifteen (15) Policy Objectives that are relevant to the Ministry of Food and Agriculture.

These are as follows:

- Promote Agriculture Mechanisation
- Improve science, technology and innovation application
- Promote seed and planting material development
- Increase access to extension services and re-orientation of agriculture education
- Improve institutional coordination for agriculture development
- Increase private sector investments in agriculture
- Improve post- production management
- Develop an effective domestic market
- Expand agriculture exports
- Promote irrigation development
- Improve Agriculture Financing
- Promote sustainable environment, land and water management
- Promote the development of selected staple and horticultural crops
- Promote the development of selected cash crops
- Promote livestock and poultry development for food security and income generation

2. GOAL

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 agricultural sector with emphasis on Crops, livestock, irrigation and mechanization of agricultural industry
- Develop and /or manage Agricultural programs and projects
- Coordinate Agricultural research

4. POLICY OUTCOME INDICATORS AND TARGETS

OUTCOME INDICATOR DESCRIPTION	UNITS OF MEASURE	BASELINE		LATEST STATUS		TARGET					
		Year	Value	Year	Value	Year	Value	Year	Value	Year	Value
PERCENTAGE CHANGE IN OUTPUT/YIELD PER UNIT AREA											
-Maize	Metric Tons (mt) produced per hectare (Ha)	2014	1.77	2015	1.82	2016	1.87	2017	1.92	2018	1.97
-Rice		2014	2.8	2015	2.92	2016	3.07	2017	3.2	2018	3.35
-Sorghum		2014	1.18	2015	1.22	2016	1.26	2017	1.3	2018	1.34
-Cassava		2014	19.13	2015	20.01	2016	21.61	2017	22.75	2018	23.99
-Yam		2014	16.83	2015	17.21	2016	17.75	2017	18.18	2018	18.69
-Cowpea		2014	1.48	2015	1.54	2016	1.58	2017	1.65	2018	1.70
Increased production of poultry, small ruminants and pigs.	Number (000)										
	Poultry (including Guinea fowl)	2014	68,511	2015	73,650	2016	79,174	2017	84,441	2018	89,773
	Sheep	2014	4,335	2015	4,521	2016	4,716	2017	4,905	2018	5,095
	Pigs	2014	682	2015	730	2016	781	2017	830	2018	879
	Goats	2014	6,044	2015	6,353	2016	6,677	2017	6,991	2018	7,307
Increased number of private mechanization services centers established	Number of centers established.	2014	89	2015	130	2016	170	2017	210	2018	240
Irrigation schemes	Area developed/ hectare (Ha)	2014	100,454	2015	110,500	2016	121,550	2017	131,050.00	2018	140,850.00
Land productivity increased	Land intensification on ratio.	2014	1.60	2015	1.80	2016	2.00	2017	1.9	2018	1.9
Reduced post harvest losses along the value chain.	Percentage (%) loss										
	Maize	2014	18.25	2015	18	2016	17.5	2017	16.22	2018	15.85
	Rice	2014	5.54	2015	5.22	2016	4.64	2017	4.2	2018	3.64
	Cassava	2014	25.46	2015	22.45	2016	20.02	2017	17.59	2018	16.45
	Yam	2014	21.96	2015	20.45	2016	19.55	2017	18.2	2018	17.36
	sorghum	2014	7.48	2015	6.84	2016	6.2	2017	5.45	2018	4.96
HARVEST AND POST HARVEST BASELINE STUDY (PPMED, 2008)											
Reduced levels of underweight and stunting in children	Prevalence of severely or moderately underweight among children (%)	2014	11.8	2015	10.6	2016	9.4	2017	9.4	2018	9.4
Reduction in numbers of food insecure (vulnerable) households	Number of households (thousands)	2014	659	2015	675	2016	692	2017	709	2018	726
National food buffer stock centers established in all regions.	Number of national buffer stock centers.	2014	10	2015	15	2016	20	2017	20	2018	20

OUTCOME INDICATOR DESCRIPTION	UNITS OF MEASURE	BASELINE		LATEST STATUS		TARGET					
		Year	Value	Year	Value	Year	Value	Year	Value	Year	Value
Seed and planting material security stocks established in all regions.	Number of security stocks established	2014	10	2015	13	2016	18	2017	18	2018	18
Increased number of people below poverty line engaged in off farm livelihood.	Number of poor/vulnerable person supported	2014	2,400	2015	2,400	2016	2,400	2017	2,400	2018	2,400
Out growers schemes developed and FBOs strengthened	Cumulative outgrower schemes developed	2014	548	2015	610	2016	678	2017	700	2018	725
Increased export of non-traditional agricultural commodities	Quality of non-traditional agricultural commodities exported (mt)	2014	567,200	2015	679,452	2016	835,726	2017	962.652	2018	1,096,915
	Percentage change in value of non-traditional agricultural export commodities (%)	2014	10.75	2015	19.79	2016	23.00	2017	30.10	2018	36.22
Institutional capacity for SLM at all levels.	Number of training on environmental integration for climate change for staff	2014	10	2015	17	2016	25	2017	25	2018	25
Increased number of Agricultural technologies	Number of new sustainable agricultural technologies developed	2014	6	2015	6	2016	6	2017	6	2018	6
Increased access to relevant technologies along the value chain.	Number of AEA's receiving ToT training on new technologies	2014	1,080	2015	1,866	2016	1,080	2017	1200	2018	1400
	Number of FBO's and CBO's trained on new technologies developed	2014	200	2015	300	2016	400	2017	400	2018	400
	Number of agricultural information centers functional	2014	34	2015	50	2016	80	2017	80	2018	80

5. EXPENDITURE TRENDS FOR THE MEDIUM-TERM

The Ministry of Food and Agriculture was allocated a budget of GH¢306.034 million and 306.892million for 2013 and 2014 financial years respectively.

The total expenditure for the period stood at GH¢285.29million, an increase from GH¢212.488million in 2013. Out of this, GoG (includes ABFA) accounted for GH¢130.6million, GH¢160.07million for Donor and GH¢0.99 million IGF. The increase in expenditure is mainly due to off budget expenditure mainly from donor inflows.

With respect to Compensation of Employees, an amount of GH¢106.949million was expended in 2013 whilst in 2014, actual expenditure stood at GH¢48.63million, a decrease of GH¢58.319million. This is as a result of stabilizing the amount paid under the Single Spine Pay Policy.

Total expenditure on Goods and Services increased from GH¢23.210million in 2013 to a GH¢167.16million in 2014. This is because some items which were originally budgeted under Assets were expended as Goods and Services due to reclassification within the GIFMIS and the reporting format of some donor projects. An amount of GH¢86.035million was expended in 2013 for Assets whilst for 2014 GH¢69.50million was spent. The decrease in expenditure is due to limited donor inflows.

The Ministry was allocated a total budget of GH¢411.821million in 2015 financial year. Out of this, the government contribution is estimated at GH¢59.63million representing 14.48%, while Development Partners were to contribute GH¢146.385 million representing 35.55% of total budget. Included in the total budget is GH¢1.806 million to be generated internally (0.44%). The other source of funding is from the Annual Budget Funding Amount (ABFA) amounting to GH¢204.0 million (49.54%). The ABFA was reduced to GH¢30.504 million (7.41%).

In 2015, the Ministry's budgetary allocation was GH¢411,821,431.00, out of which a total of GH¢98.067million has been expended as at 30th June, 2015. As at 30th June 2015, actual receipts stood at GH¢137.558 million representing 33.40% of total approved budget.

For the 2016 to 2018 medium term, the Ministry has been allocated a total amount of GH¢342,338,583, GH¢467,866,542 and GH¢509,779,152 respectively. The spending focus over the medium term will be on capital expenditure.

6. SUMMARY OF KEY ACHIEVEMENTS IN 2015

The key achievements under the programmes are as follows:

Management and Administration

The Ministry with the support from JICA has reviewed and validated asset register for five (5) directorates and in collaboration with the National Development Planning Commission (NDPC) developed the Medium Term Investment Plan II (METASIP II 2014-2017).

Food Security and Emergency Preparedness

To increase access to the use of certified seeds and other planting materials, a total of 60,000mt of rice, sorghum, cowpea, soybean, groundnut, cassava, yam, plantain and citrus foundation seeds were targeted to be produced in 2015. However, out of a target of 45.5ha of foundation seed of maize, rice, sorghum, cowpea and soybean, 42.5ha were planted to produce 42.5mt of foundation seeds. The foundation seeds will be cultivated by seeds growers to produce 2,430mt of certified seeds for farmers. The difference of 3mt will be produced during the minor season.

Under the enhanced access to quality rice seed initiative, 200mt of improved rice seed have been distributed to 10,000 farmers in the Volta and the three (3) Northern regions to increase productivity and incomes of farmers.

With regards to the National Fertilizer Subsidy programme, out of the target of 180,000mt, 90,000mt of fertilizer was procured. Distribution to farmers is ongoing countrywide. This is expected to increase the use of fertilizer in the country and also enhance crop production especially in the Northern Sector where soil nutrients are low. In compliance with the Plant and Fertilizer Act, 2010 (Act 803), the Ministry in collaboration with the Ghana Standards Authority, Ghana Atomic Energy Commission, Envaserve Research Consults and SGS Research Laboratories analyzed eleven (11) newly introduced fertilizer samples.

Mechanization, Irrigation and Water Management

77 agricultural tractors, 49 power tillers, 20 rice threshers, 11 rice reapers and 6 rice mills with their respective components were imported, assembled and distributed to rice farmers under MOFA's machinery subsidy and high purchase terms. This is expected to enhance farmers' timely access to agricultural machinery/equipment for operations along the value chain. It is also expected to boost local rice production from 2.8mt/ha (2014) to 2.92mt/ha (an increase of 4%). In addition, 100 units of compact tractors (medium tractors) with multiple implements (rice reapers, mulchers, rotovators) were imported from Czech Republic, assembled and are also being distributed to individual farmers/groups under MOFA's machinery subsidy and on hire purchase terms.

The Ministry under a Spanish protocol proposed to establish seven (7) Irrigation Technology Transfer Units (ITTUs) for five (5) agricultural colleges and two (2) farming communities. The Ministry established Irrigation Technology Transfer Units (ITTUs) at

four (4) agricultural colleges. The ITTUs will serve as demonstration models to showcase latest irrigation technology using ground and surface water resources at the end of the project, about 14 hectares of land will be put under sprinkler and drip irrigation for vegetable production whilst 106ha of land will be supplied with irrigation kits.

In addition, 7,456 ha of land out of a target of 10,046ha was developed and cropped under the irrigation and flood recession scheme/water conservation methods. This is expected to yield 165,665mt of rice, maize, onions, pepper, tomatoes and leafy vegetables under the irrigation/flood recession schemes and water conservation methods in 2015 cropping season.

To improve vegetable production, phase two (2) of the Akumadan Irrigation Scheme is expected to add 40ha of land area, 8km road, 2 drinking water supply points and 3 public lavatories. This is expected to improve good agricultural practices thereby increasing the incomes of farmers by the end of the 2015 cropping year.

The Ministry through Ghana Irrigation Authority (GIDA) has also provided technical support for the feasibility study of 20,000ha of the Pwalugu multipurpose dam. The rehabilitation of Adiembra Irrigation scheme (45ha) has been completed for rice cultivation. In addition, the rehabilitation of other Nine (9) schemes earmarked for the year are at various stages of completion. These are Agorveme (20%), Volo (36%), Afaode (20%), Tordzinu (100%), Dordoekope (95%), Koloe-Dayi (70%), Tokpo (77%), Ekotsi (20%) and Baafikrom (100%) schemes. When completed, these will increase the irrigable land available to farmers to promote crops production all year round.

Increased Growth in Incomes

Promotion of Cash Crop and Livestock Production

In 2015, 320 female guinea fowl out grower farmers were given hands on training in improved Guinea fowl production and received 1,600 (eight weeks old) grower birds as a startup stock for production in the Northern, Upper East and West regions to increase guinea fowl production and livelihood.

Under the West Africa Agricultural Productivity Programme, superior breeds of 650 sheep and 450 goats were procured and distributed to 90 farmers in the Central, Western and Eastern Regions.

In 2015, to achieve the target of increasing pig production from 682,000 in 2014 to 730,000, about 700 startup stocks were distributed to farmers at a subsidized rate for the production of pigs.

The Ministry also cultivated 6 hectares of land at Ejura Sheep Breeding Station with *Stylosanthes hamata* to reduce the negative impact of climate change in communities experiencing overgrazing.

Marketing of Agricultural Produce/Products

This programme provides the enabling environment to facilitate export trade and increase participation of small to medium holders in the marketing of agricultural commodities locally.

The Ministry in collaboration with the private sector has established a total of 2,500ha of cotton farms with an expected yield of 1,500mt of seed cotton. This is expected to improve cotton production in the country. In addition, the Ministry the Cotton Development Board has been inaugurated to regulate the activities of the cotton industry. This will help farmers explore the full potential of cotton as a cash crop and generate income to farmers.

In 2015, Phytosanitary inspections and certification of commodities were carried out. This led to the issuance of 202 import permits and 9 phytosanitary certificates. The Ministry has inaugurated Cotton Development Board to regulate the activities of the cotton industry. This will help farmers explore the full potential of cotton as a cash crop and hence generate income to farmers.

Management of Land and Environment

Under the programme, the Ministry will facilitate the implementation of Sustainable Land and Environmental Management (SLEM) practices in agriculture. Emphasis will be laid on increasing the resilience of agricultural production systems against global climate change.

In line with the above, 63 communities in 10 Districts of the Upper East, Upper West, and Northern regions were supported to implement various Sustainable Land and Water management technologies under the Sustainable Land and Water management Project (SLWMP). Under this project, 5,000 farmers were directly supported to implement various SLWM technologies, which include bunding, soil nutrient management, riparian vegetation improvement and tree planting. 104,000 tree seedlings were planted in 2015. Adaptation of Agro Eco System to Climate Change (AAESCC) project supported 16 communities in Northern and Brond Ahafo regions to implement various climate change adaptation interventions, which included training of 1200 farmers in seed production, training of 1000 fire fighting volunteers in collaboration with GNFS, promotion of agro-forestry and soil fertility management technologies to 16 communities.

The Resilient Landscapes for Sustainable Livelihood (RLSL) pilot project is a Technical Cooperation Project with FAO. Under this project, 10 communities are being prepared for Farmer Field Schools (FFS), Village Savings Loans Associations (VSLAs) and Community Assets Creation and Management.

Science and Technology in Food and Agricultural Development

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

In 2015, the Ministry produced 16 million doses of ND1-2 vaccines out of a target of 32 million for the control of Newcastle disease in poultry. A total of 5,750,000 doses were also distributed country wide.

In order to manage Avian Influenza outbreak, the Ministry destroyed a total of 37,143 birds in 18 affected farms in 3 three Regions. The remaining 7 Regions are highly at risk. Very stringent measures such as destruction, disinfection and compensation of farmers have been put in place. The estimated total economic loss due to the Avian Influenza to farmers and the country is approximately 4 billion Ghana Cedis.

The Ministry in collaboration with CSIR, have released five new hybrid maize varieties (Sika Aburo, kunjor-wari,Suhudoo, Warikamana, kpari-faako) and 6 new cassava varieties have been recommended for release. The released varieties have average potential yields of 6tons/ha and 20tons/ha for maize and cassava respectively.

BUDGET BY SUB-PROGRAMME, ECONOMIC ITEM AND FUNDING

	GoG				IGF				Funds / Others			Donors			Grand Total
	Compensation of employees	Goods and Services	Capex	Total	Compensation of employees	Goods and Services	Capex	Total	Statutory	ABFA	Others	Goods and Services	Capex	Total	
012001 - Management and Administration	14,706,367	1,526,013		16,232,380		166,235		166,235		3,000,000		1,687,801	6,751,203	8,439,004	27,837,619
0120011 - Finance and Administration	1,339,788	1,251,013		2,590,801						3,000,000		723,343	2,893,373	3,616,716	9,207,517
0120012- Human Resource Development and	10,972,222	205,000		11,177,222		166,235		166,235							11,343,457
0120013- Policy; Planning; Budgeting; Monitoring and Evaluation	1,492,574			1,492,574								964,458	3,857,830	4,822,288	6,314,862
0120014 - Research, Statistics, Information, Communication and	901,783	70,000		971,783											971,783
012002 - Food Security and Emergency Preparedness	35,084,945	716,892		35,801,837		983,252	450,884	1,434,136		224,317,904		37,273,097	90,208,988	127,482,084	389,035,962
0120021 - Productivity improvement.	29,131,742	498,300		29,630,042		983,252	450,884	1,434,136		163,615,132		27,223,491	81,891,551	109,115,042	303,794,351
0120022 - Mechanization, Irrigation and water management	5,472,393	143,706		5,616,099						60,702,772		72,688	280,290	352,978	66,671,849
0120023 - Food storage, distribution and improved	480,811	26,000		506,811								7,766,702		7,766,702	8,273,513
0120024- Early warning systems and emergency preparedness.		25,000		25,000											25,000
0120025- Diversification of livelihood options		23,886		23,886								2,210,216	8,037,147	10,247,363	10,271,249
012003 - Increased Growth in Incomes	7,251,222	361,662		7,612,884		1,660,839	804,440	2,465,279				17,681,331	4,935,998	22,617,329	32,695,492
0120031- Promotion of cash crop; and livestock production	6,058,804	328,761		6,387,565		1,660,839	804,440	2,465,279				4,696,670	350,362	5,047,032	13,899,876
0120032- Strengthening of FBOs and out-grower schemes	1,010,572	32,901		1,043,473								12,003,889		12,003,889	13,047,362
0120033- Rural Infrastructure Development	181,846			181,846									4,585,636	4,585,636	4,767,482
0120034- Urban and Peri - urban Agriculture												980,772		980,772	980,772
012004 - Marketing of Agricultural Produce/Products		35,350		35,350											35,350
0120040- Agricultural Produce Marketing		35,350		35,350											35,350
012005 - Management of Land and Environment		10,000		10,000											10,000
0120050- Agricultural Land Management		10,000		10,000											10,000
012006 - Application of Science and Technology in		83,871		83,871						35,000,000		3,460,293	13,343,120	16,803,413	51,887,284
0120060- Science and Technology in Agricultural		83,871		83,871						35,000,000		3,460,293	13,343,120	16,803,413	51,887,284
Grand Total	57,042,535	2,733,788		59,776,323		2,810,326	1,255,324	4,065,650		262,317,904		60,102,522	115,239,309	175,341,830	501,501,707

PART B: BUDGET PROGRAMME SUMMARY

PROGRAMME 1: MANAGEMENT AND ADMINISTRATION

1. Budget Programme 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 Programme Description

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

- Setting the MDA's policy direction through the reviews, formulation and coordination of policies and programmes.
- Managing human resource, budget, finance, central procurement, stores and logistics, ICT Services, public relations, organizational development and corporate training.

The organizational units responsible for delivering this programme are General Administration and Finance, PPMED, HRDM and SRID.

The beneficiaries of this programme are the Ministry and other key stakeholders in the agricultural sector. The programme is funded mainly by GoG, Donor (CIDA, GIZ, WB, USAID etc.) and IGF.

The main challenge faced in the delivery of this programme is the weak collaboration in planning and execution of policies and programmes with key stakeholders.

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year	Indicative Year
012001 - Management and Administration	27,837,619	24,795,974	25,241,989
	1,339,788	1,181,073	1,239,217
0120011 - Finance and Administration	1,974,356	775,677	775,677
	5,893,373	3,893,373	3,893,373
211 - Wages and salaries [GFS]	1,339,788	1,181,073	1,239,217
21 - Compensation of employees [GFS]	1,339,788	1,181,073	1,239,217
Use of goods and services	1,974,356	775,677	775,677
Goods and Services	1,974,356	775,677	775,677
311 - Fixed assets	5,893,373	3,893,373	3,893,373
Capex	5,893,373	3,893,373	3,893,373
0120012- Human Resource Development and Management	10,972,222	11,176,331	11,390,646
	371,235	344,859	395,544
211 - Wages and salaries [GFS]	10,972,222	11,176,331	11,390,646
21 - Compensation of employees [GFS]	10,972,222	11,176,331	11,390,646
Use of goods and services	371,235	344,859	395,544
Goods and Services	371,235	344,859	395,544
0120013- Policy; Planning; Budgeting; Monitoring and	1,492,574	1,565,643	1,642,365
	964,458	1,050,904	1,050,904
	3,857,830	3,857,830	3,857,830
211 - Wages and salaries [GFS]	1,492,574	1,565,643	1,642,365
21 - Compensation of employees [GFS]	1,492,574	1,565,643	1,642,365

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
Use of goods and services	964,458	1,050,904	1,050,904
Goods and Services	964,458	1,050,904	1,050,904
311 - Fixed assets	3,857,830	3,857,830	3,857,830
Capex	3,857,830	3,857,830	3,857,830
0120014 - Research, Statistics, Information, Communication	901,783	950,284	996,433
	70,000		
211 - Wages and salaries [GFS]	901,783	950,284	996,433
21 - Compensation of employees [GFS]	901,783	950,284	996,433
Use of goods and services	70,000		
Goods and Services	70,000		

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 1: MANAGEMENT AND ADMINISTRATION SUB-PROGRAMME SP1.1: Finance and Administration

1. Budget Sub-Programme Objectives

- To effectively coordinate the activities of the Ministry and its Agencies
- To ensure the provision of adequate logistics
- To establish and implement an effective and efficient financial management system within the Ministry.

2. Budget Sub-Programme Description

This sub-programme seeks to develop an effective electronic framework for financial and asset management and for quarterly and annual reporting. It seeks to train and upgrade accounting staff in financial and asset management. The sub programme also 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 assets and liabilities (i.e. Plan and administer the maintenance of properties, manage lease agreements, etc.);
- Audit financial transactions and respond to external audit queries; and
- Provide legal services.

The organizational units responsible for delivering this sub-programme are General Administration and Finance with a total number of 100 staff.

The beneficiaries of this programme are the Ministry and its agencies in the agricultural sector. The programme is funded mainly by GoG, Donor (CIDA, JICA etc.) and IGF.

The main challenge faced in the delivery of this sub-programme is the high attrition rate of staff.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Agriculture related national and international shows organized	Number of shows organized	5	5	5	4	4
Procurement plan prepared	Plan prepared by	31st October	31st Oct.	31st Oct.	31st Oct.	31st Oct.
Asset register	Asset register reviewed by	31st Dec.	31st Dec.	31st Dec.	31st Dec.	31st Dec.
Reports produced	Number of financial reports	4	4	4	4	4
	Audit report	1	1	1	1	1

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Internal Management of the Organisation	Computer Hardwares and accessories
Local and International Affiliations.	
Preparation of Financial Reports	
Procurement of Office Supplies and Consumables	
Treasury and Accounting Activities	
Legal and Administrative Framework Reviews	
Contractual Obligations and Commitments	
Internal Audit Operations	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120011 - Finance and Administration	9,207,517	5,850,124	5,908,267
21 - Compensation of employees [GFS]	1,339,788	1,181,073	1,239,217
Capex	5,893,373	3,893,373	3,893,373
Goods and Services	1,974,356	775,677	775,677

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 1: MANAGEMENT AND ADMINISTRATION SUB-PROGRAMME SP 1.2: Human Resource Development and Management

1. Budget Sub-Programme Objective

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

2. Budget Sub-Programme Description

The operations of the sub-programme 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.

The sub-programme through the agricultural training colleges provide training for middle level manpower personnel whilst the farm institutes provide vocational training to prospective and practicing farmers and farm hands. The Human resource Development and Management Directorate also collaborate with tertiary institutions on graduate and postgraduate training of MOFA staff and also undertake curriculum review in line with the sector needs.

The main operations under this sub-programme include facilitate the training of staff, conduct tracer studies and outreach programmes to increase enrolment of females into the agricultural institutions and coordinate staff progression activities.

The organizational unit responsible for delivering this sub-programme is the Human Resource Development and Management Directorate with a total number of 342 Staff. The beneficiaries of this programme are the staff of Ministry, farmers and the youth. The programme is funded mainly by GoG, Development Partners Fund (CIDA, GIZ etc.) and IGF. The main challenge faced in the delivery of this sub-programme is the high attrition rate of staff.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Human resource database reviewed and updated quarterly	Number of times updated in a year	1	1	1	1	1
Human resource within the ministry, relevant MDAs and other actors along the agricultural value chain developed (trained).						
- In-service training	Number of staff trained	70	80	90	105	110
- Local courses		250	300	350	400	405
- Foreign training		250	300	350	410	410
- Middle level manpower training		451	550	600	600	650
- Prospective and practicing farmers vocational training		120	200	250	300	300

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Agric Education	No Projects
Procurement of Office Supplies and Consumables	
Human Resource Database	
Manpower Skills Development	
Local and International Affiliations	
Management and Monitoring Policies Programmes and Projects	
Recruitment, Placement and Promotions	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120012- Human Resource Development and Management	11,343,457	11,521,190	11,786,190
21 - Compensation of employees [GFS]	10,972,222	11,176,331	11,390,646
Goods and Services	371,235	344,859	395,544

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 1: MANAGEMENT AND ADMINISTRATION

SUB-PROGRAMME SP 1.3: Policy, Planning, Budgeting, Monitoring and Evaluation (PPBME)

1. Budget Sub-Programme Objective

- To improve planning, policy analysis, monitoring and evaluation in the agricultural sector.
- To strengthen the platform for engagement between MOFA and DPs, Civil Society Organizations, the Private Sector and other MDAs.

2. Budget Sub-Programme Description

This sub-programme seeks to facilitate the formulation of policies, programmes and projects for the development of agriculture in Ghana. It also monitors and evaluates the implementation of these policies and programmes. The sub-program also promotes coordination between stakeholders to address emerging issues and mitigate risks to the achievement of objectives of the sector.

The main operations involved are:

- Planning, development and review of all policy documents.
- Coordinating the preparation and implementation of the Ministry's budget
- Monitoring, evaluation and reporting on implementation of programmes and projects

The organizational unit responsible for delivering this sub-programme is the Policy, Planning, Monitoring and Evaluation Directorate with a total number of 88 Staff.

The beneficiaries of this programme are the Ministry, its agencies and other stakeholders. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.)

The main challenge faced in the delivery of this sub-programme is the high attrition rate of staff.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Monitoring and evaluation reports	M&E report produced and disseminated	31 st March	31 st March	31 st March	31 st March	31 st March

4. Budget Sub-Programme Operations and Projects

The table lists the main Operations and Projects to be undertaken by the Sub-programme.

Operations	Projects
Budget Preparation	No Projects
Budget Performance Reporting	
Planning and Policy Formulation	
Publication and dissemination of Policies and Programmes	
Policies and Programmes Review Activities	
Management and Monitoring Policies, Programmes and Projects	
Evaluation and impact assessment activities	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120013- Policy; Planning; Budgeting; Monitoring and Evaluation	6,314,862	6,474,377	6,551,099
21 - Compensation of employees [GFS]	1,492,574	1,565,643	1,642,365
Capex	3,857,830	3,857,830	3,857,830
Goods and Services	964,458	1,050,904	1,050,904

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 1: MANAGEMENT AND ADMINISTRATION

SUB-PROGRAMME SP 1.4: Research, Statistic, Information, Communication and Public Relations

1. Budget Sub-Programme Objective

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

2. Budget Sub-Programme Description

The operations of this sub-programme 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. It also collaborates with relevant institutions to provide statistics for policy formulation, planning, implementation, monitoring and evaluation at all levels.

The operations involved are:

- Collection, processing and analysis of area, yield and production data on major crops.
- Collaboration with relevant stakeholders to collect process and analyze livestock and poultry data.
- Monitoring agricultural trade statistics, producer prices, farm input prices and transport charges for agricultural commodities.
- Collection and analysis of weekly market prices of various agricultural produce at wholesale and retail levels

ICT: Promote the use of Information Communication Technology (ICT) to support the operations in the agricultural sector.

The operations involved are:

- Updating of MoFA Website daily
- Build the capacity of MoFA staff
- Manage ICT infrastructure and e-Agriculture services of MoFA

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

The operations involved are:

- Dissemination of information to MOFA staff and the general public
- Manage information bank for easy access and rapid reference through interactive electronic platform
- Upgrade capacity of MoFA staff on information/knowledge management

The organizational units responsible for delivering this sub-programme are the Statistics Research and Information Directorate (SRID), Information Communication Technology (ICT) Unit and the Ministry of Food and Agriculture Information Resource Centre (MOFAIR) with a total number of 50 Staff.

The beneficiaries of this programme are the Ministry, its agencies and other stakeholders. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.). The main challenge faced in the delivery of this sub-programme is the high attrition rate of staff.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Reliable and timely information	Number of website hits	110000	150000	180000	220000	240000
Agricultural Facts and Figures disseminated	Number of copies	1,200	1,200	1,400	1,600	1,800
Intranet established in all directorates	Number of Directorates connected	5	5	5	10	10
MOFA staff capacity in ICT upgraded	Number of staff trained	62	62	62	82	85

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Research and Development	No Projects

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120014 - Research, Statistics, Information, Communication and Public Relations	971,783	950,284	996,433
21 - Compensation of employees [GFS]	901,783	950,284	996,433
Goods and Services	70,000		

BUDGET PROGRAMME SUMMARY

PROGRAMME 2: FOOD SECURITY AND EMERGENCY PREPAREDNESS

1. Budget Programme 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 Programme Description

The programme for enhancing food security and emergency preparedness is delivered through a number of sub-programmes, namely:

- **Productivity Improvement:** This identifies updates and disseminates technological packages and assists farmers to stay abreast with good industry practices.
- **Mechanization, Irrigation and Water Management:** The sub-programme is responsible for policy formulation and development of programmes and projects to improve access to farm power machinery and appropriate technology. It also involves increasing irrigated areas while emphasizing water management techniques.
- **Food Storage, Distribution and Improved Nutrition:** This is responsible for improving advocacy on nutrition and food fortification while reducing post-harvest losses.
- **Diversification of Livelihood Options:** Involves agro processing, Micro and Small Enterprises (MSEs) production of soap and creams from agricultural by-products.
- **Early Warning Systems and Emergency Preparedness:** This identifies disaster prone areas of the country and constructs vulnerability maps to support targeting of food security and emergency preparedness interventions.

The organizational units responsible for delivering this programme are General Administration and Finance, PPMED, HRDM and SRID.

The beneficiaries of this programme are the Ministry and other key stakeholders in the agricultural sector. The programme is funded mainly by GoG, Donor (CIDA, GIZ, WB, USAID etc.) and IGF.

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year	Indicative Year
012002 - Food Security and Emergency Preparedness	389,035,962	411,033,797	434,970,740
	29,131,742	30,604,774	32,134,052
0120021 - Productivity improvement.	192,320,175	205,134,706	227,194,727
	82,342,435	89,695,574	89,730,339
211 - Wages and salaries [GFS]	29,131,742	30,604,774	32,134,052
21 - Compensation of employees [GFS]	29,131,742	30,604,774	32,134,052
Use of goods and services	192,320,175	205,134,706	227,194,727
Goods and Services	192,320,175	205,134,706	227,194,727
311 - Fixed assets	82,342,435	89,695,574	89,730,339
Capex	82,342,435	89,695,574	89,730,339
	5,472,393	5,742,109	6,025,499
0120022 - Mechanization, Irrigation and water management	216,394	79,888	79,888
	60,983,062	60,983,062	60,983,062
211 - Wages and salaries [GFS]	5,472,393	5,742,109	6,025,499
21 - Compensation of employees [GFS]	5,472,393	5,742,109	6,025,499
Use of goods and services	216,394	79,888	79,888
Goods and Services	216,394	79,888	79,888
311 - Fixed assets	60,983,062	60,983,062	60,983,062
Capex	60,983,062	60,983,062	60,983,062
	480,811	504,852	530,094
0120023 - Food storage, distribution and improved nutrition	7,792,702	7,795,302	7,798,162

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	indicative Year 1	indicative Year 2
211 - Wages and salaries [GFS]	480,811	504,852	530,094
21 - Compensation of employees [GFS]	480,811	504,852	530,094
Use of goods and services	7,792,702	7,795,302	7,798,162
Goods and Services	7,792,702	7,795,302	7,798,162
0120024- Early warning systems and emergency	25,000		
Use of goods and services	25,000		
Goods and Services	25,000		
0120025- Diversification of livelihood options	2,234,102	2,456,383	2,457,769
	8,037,147	8,037,147	8,037,147
Use of goods and services	2,234,102	2,456,383	2,457,769
Goods and Services	2,234,102	2,456,383	2,457,769
311 - Fixed assets	8,037,147	8,037,147	8,037,147
Capex	8,037,147	8,037,147	8,037,147

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 2: FOOD SECURITY AND EMERGENCY PREPAREDNESS

SUB-PROGRAMME SP 2.1: Productivity Improvement

1. Budget Sub-Programme Objective

- To increase productivity of priority commodities through the use of improved agricultural inputs and Good Agricultural Practices (GAP).
- To improve seed/planting material/breeding stock for multiplication in the Agricultural Stations and other locations in all regions

2. Budget Sub-Programme Description

This sub-programme identifies updates and disseminates technological packages to assist farmers to stay abreast with good industry practices. It also introduces new and improved seed/planting material/breeding stock (high yielding, short duration, disease and pest resistant and nutrient-fortified) to increase productivity.

The main functions under this sub-programme are as follows;

- Facilitate farmer access to improved planting materials, breeding stock and fertilizer
- Expand infrastructure for seed/planting materials and breeding stock production, processing, storage and marketing to facilitate private sector involvement.
- Increase production in targeted products such as poultry (including Guinea Fowl), small ruminants and pigs.
- Promote the production and productivity of roots and tuber crops
- Develop arable lands for rice cultivation

The organizational units responsible for delivering this sub-programme are CSD, PPRSD, APD, GLDB, VSD and DAES. The beneficiaries of this sub-programme are farmers and other stakeholders. The programme is funded mainly by GoG, Donor (CIDA, GIZ, WB, USAID, IFAD, AfDB, and JICA) and IGF.

The main challenges faced in the delivery of this sub-programme are high cost of agricultural inputs, dilapidated infrastructure for processing and storage, and absence of a harmonized regulatory framework.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Increased yields in:						
Maize	Metric Tonnes per Hectare	1.77	1.82	1.87	1.92	1.97
Rice (Paddy)		2.80	2.92f	3.07	3.20	3.35
Sorghum		1.18	1.22	1.26	1.30	1.34
Cassava		19.13	20.01	21.61	22.75	23.99
Yam		16.83	17.21	17.75	18.18	18.69
Cowpea		1.48	1.54	1.58	1.65	1.70
Increased Production of:						
Poultry (Including guinea fowl)	Number	68,511	53,650	79,174	84,441	89,773
Sheep		4,335	4,521	4,716	4,905	5,095
Pigs		682	730	781	830	879
Goats		6,044	6,353	6,677	6,991	7,307

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Agricultural facilities and Infrastructure	Development and Management of Farmer Based Organizations
Operation of agricultural research stations	
National strategic stock programmes	
Sustainable Land and Water Management	
Plants, Fertilizer and Seed Management	
Production and acquisition of improved breeds	
Surveillance and Management of Diseases and Pests	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120021 - Productivity improvement.	303,794,351	325,435,054	349,059,119
21 - Compensation of employees [GFS]	29,131,742	30,604,774	32,134,052
Capex	82,342,435	89,695,574	89,730,339
Goods and Services	192,320,175	205,134,706	227,194,727

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 2: FOOD SECURITY AND EMERGENCY PREPAREDNESS

SUB-PROGRAMME SP 2.2: Mechanization, Irrigation and Water Management

1. Budget Sub-Programme Objectives

- To provide access to efficient mechanized services along the value chain
- To accelerate the development and management of irrigation schemes.
- To improve productivity through increased land intensification ratios on water management schemes.

2. Budget Sub-Programme Description Mechanization

This component of the sub-programme ensures the availability of farm power machinery and other engineering technologies for all categories of farmers and agro – processors along the value chain.

The main operations involved are:

- Facilitate the establishment of private sector led Agricultural Mechanisation Services Enterprise Centers to provide mechanised services to farmers. (at least one AMSEC established in each district).
- Identify and select appropriate farm power machinery and equipment for farmers in collaboration with research institutes.
- Develop the skilled man power to handle, manage and maintain farm power machinery
- Develop the skilled man power to locally fabricate simple tools and parts for machinery
- Promote the use of simple and gender friendly farm tools and equipment by small holder farmers,
- Intensify the use of animal traction and intermediate means of transport by smallholder farmers operating on fragile soils.

Irrigation and Water Management

This component of the sub-programme seeks to expand the area under irrigated agriculture through the execution of plans leading to the development of land and water resources.

The main operations involved are;

- Undertaking site identification, selection and conducting feasibility studies.
- Mapping out suitable and potential sites for irrigation development.
- Facilitating construction of new irrigation schemes and rehabilitation of existing ones.
- Supporting the formation and training of farmer groups (water users) in water management practices, facility operation and maintenance.

- Training extension workers in irrigation and water management techniques
- Providing scheme management services to farmers on public irrigation schemes.
- Providing technical services on irrigated agriculture to its clients.

The organizational units responsible for delivering this sub-programme are the Agricultural Engineering Services Directorate, Irrigation Company of Upper Region (ICOUR) and the Ghana Irrigation Development Authority through its regional and scheme offices and have a total staff number of 538.

The beneficiaries of this sub-programme are farmers and entrepreneurs. The main sources of funding are GoG, Donor (CIDA, WB, AfDB, BADEA, JICA Brazilian Credit Facility, Japanese grant facility, EDAIF, etc and IGF.

The challenges faced in the delivery of this sub-programme are:

- High attrition rate of professional staff and machinery (tractor) operators.
- Inadequate Agricultural Machinery Workshops and spare parts dealers to provide after sales services.
- Absence/lack of basic maintenance equipment to cut down on cost of rehabilitation of schemes.
- High energy cost of pump schemes.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Land productivity increased	Land intensification ratio	1.60	1.80	2.0	1.90	1.90
Irrigation schemes developed	Area developed (ha)	100,454	110,500	121,550	131,050	140,850
Private sector mechanization centers established	Number of centers established	89	130	170	210	240

4. Budget Sub-Programme Operations and Projects

The table lists the main Operations and Projects to be undertaken by the

Operations	Projects
Agricultural Facilities and Infrastructure (Maintenance of machinery and plant, office facilities etc)	Agricultural facilities and Infrastructure (Irrigation systems etc.)
Sustainable Land and Water Management (Visits conferences, seminars etc)	Sustainable Land and Water Management (Irrigation systems)

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120022 - Mechanization, Irrigation and water management	66,671,849	66,805,059	67,088,449
21 - Compensation of employees [GFS]	5,472,393	5,742,109	6,025,499
Capex	60,983,062	60,983,062	60,983,062
Goods and Services	216,394	79,888	79,888

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 2: Food Security and Emergency Preparedness

SUB-PROGRAMME SP 2.3: Food Storage, Distribution and Improved Nutrition

1. Budget Sub-Programme Objectives

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

2. Budget Sub-Programme Description

This sub-programme focusses on reducing risks associated with natural disasters, diseases/pest outbreaks and ensuring availability of food stocks. It also involves the establishment of regulated warehousing systems and developing technologies in post-harvest handling for actors along the value chain. The sub-programme further seeks to improve the intake of nutrients-dense foods through awareness creation.

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 strengthening linkages between producers and markets;
- Improving advocacy/nutrition education to enhance knowledge of the importance of optimum nutrition; and
- Ensuring food production systems that take into consideration foodstuffs with both macro and micro nutrients and food fortification/enrichment as an important component of food processing.

The organizational units responsible for delivering this sub-programme are the Women in Agricultural Development, Agricultural Engineering Services Directorate, Plant Protection and Regulatory Services Directorate, National Buffer Stock Company Limited with a total staff number of 164. The beneficiaries of this sub-programme are farmers and other stakeholders along the value chain. The main sources of funding are GoG, Donor (CIDA, WB, AfDB, BADEA, JICA, Japanese grant facility, etc) and IGF.

The challenges faced in the delivery of this sub-programme are:

- Inadequate warehousing facilities
- Low integration of commodity markets

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Post-harvest losses reduced						
Maize	Percentage (%)	1.77	1.82	1.87	1.92	1.97
Rice		2.80	2.92	3.07	3.20	3.35
Sorghum		1.18	1.22	1.26	1.30	1.34
Cowpea		1.48	1.54	1.58	1.65	1.70
Cassava		19.13	20.01	21.61	22.75	23.99
Yam		16.83	17.21	17.75	18.18	18.69
Volumes of strategic stocks						
- Stored Grains	Metric tonnes (MT)	50,000	50,000	50,000	50,000	50,000

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Agricultural Education	Agricultural Facilities and Infrastructure (Warehouses etc)

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120023 - Food storage, distribution and improved nutrition	8,273,513	8,300,154	8,328,256
21 - Compensation of employees [GFS]	480,811	504,852	530,094
Goods and Services	7,792,702	7,795,302	7,798,162

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 2: FOOD SECURITY AND EMERGENCY PREPAREDNESS

SUB-PROGRAMME SP 2.4: Early Warning Systems and Emergency Preparedness

1. Budget Sub-Programme Objective

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

2. Budget Sub-Programme Description

The Sub-Programme 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 and animal products and produce;
- Coordinating pest and disease surveillance activities;
- Facilitating activities of diagnostic laboratories;
- Establishing Buffer stock centres in all regions;
- Establishing a National Seed Security stock for emergencies; and
- Collaborate with Relevant agencies to identify early warning signs.

The organizational units responsible for delivering this sub-programme are the Crops Services Directorate, Plant Protection and Regulatory Services Directorate, Grains and Legumes Development Board, National Buffer Stock Company, Veterinary Services Directorate with a total staff number of 1096.

The beneficiaries of this sub-programme are farmers and other stakeholders along the value chain. The main sources of funding are GoG, Donor (CIDA, AfDB, World Food Programme etc).

The challenges faced in the delivery of this sub-programme are:

- Weak collaboration among key stakeholders
- Inadequate warehousing facilities

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Reduction in numbers of food insecure (vulnerable) households	Number of households (thousand)	659	675	692	709	726
National food buffer stock centers established in all regions.	Number of buffer stock centers	10	15	20	-	-
Seed/planting material security stock established in all regions	Number of security stock established	10	13	18	18	18
The poor/ vulnerable supported to engage in off- farm livelihood alternatives.	Number poor /vulnerable persons supported	2,400	2,400	2,400	2,400	2,400

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
National Fruit fly management	No Projects
National Vaccination exercise	
Surveillance and Management of Diseases and Pests	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget
0120024- Early warning systems and emergency preparedness.	25,000
Goods and Services	25,000

BUDGET PROGRAMME SUMMARY

PROGRAMME 2: FOOD SECURITY AND EMERGENCY PREPAREDNESS

SUB-PROGRAMME SP 2.5: Diversification of Livelihood Options

1. Budget Sub-Programme Objective

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

2. Budget Sub-Programme Description

The Sub-programme supports poor subsistence farmers to diversify their production systems and engage in alternative livelihood activities such as agro processing (cassava flour, local cooking oils, production of soap and creams from agricultural by-products). It also involves the production of 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. The organizational units responsible for delivering this sub-programme are the Women in Agricultural Development and Animal Production Directorate with a total staff number of 255.

The beneficiaries of this sub-programme are farmers, small scale agro processors and other stakeholders along the value chain. The main sources of funding are GoG, Donor (CIDA, WB, AfDB, etc). The challenge faced in the delivery of this sub-programme is limited capacity of the poor to engage in income generating activities

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
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
Bee Keeping		200	200	200	200	200
Cockerel		1500	1500	1500	1500	1500
Soap & Pomade prod		500	500	500	500	500
Rabbit		300	300	300	300	300

4. Budget Sub-Programme Operations and Projects

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

Operations
Extension Services
Production of Extension materials and services
Personnel and staff Management

Projects
No Projects

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120025- Diversification of livelihood options	10,271,249	10,493,530	10,494,916
Capex	8,037,147	8,037,147	8,037,147
Goods and Services	2,234,102	2,456,383	2,457,769

BUDGET PROGRAMME SUMMARY

PROGRAMME 3: INCREASED GROWTH IN INCOMES

1. Budget Programme 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 Programme Description

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

- Promotion of cash crop and livestock production for income in all ecological zones through extension services and enhanced access to certified seeds for cash crops and improved breeding stock.
- 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, undertaking market feasibility studies for value added goods, facilitating linkages 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 and the development of rural industrial processing of cash crops and livestock.
- Supporting urban and peri-urban agriculture to improve nutrition.

The organizational unit responsible for delivering this sub-programme is the Animal Production Directorate, Veterinary Services Directorate, Crops Services Directorate, Women in Agricultural Development Directorate, Agricultural Engineering Services Directorate, Plant Protection and Regulatory Services Directorate and RADUs with a total number of 1,903 staff.

The beneficiaries of this programme are the farmers and other stakeholders along the value chain. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.) and IGF

The main challenges faced in the delivery of this sub-programme include encroachment on farm lands and the use of waste water for irrigating crops.

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year	Indicative Year
012003 - Increased Growth in Incomes	32,695,492	31,373,457	32,078,183
	6,058,804	2,996,360	3,153,188
0120031- Promotion of cash crop; and livestock production	6,686,270	7,065,753	7,376,912
	1,154,802	1,235,246	1,412,223
211 - Wages and salaries [GFS]	6,058,804	2,996,360	3,153,188
21 - Compensation of employees [GFS]	6,058,804	2,996,360	3,153,188
Use of goods and services	6,686,270	7,065,753	7,376,912
Goods and Services	6,686,270	7,065,753	7,376,912
311 - Fixed assets	1,154,802	1,235,246	1,412,223
Capex	1,154,802	1,235,246	1,412,223
0120032- Strengthening of FBOs and out - grower schemes	1,010,572	1,059,118	1,110,090
	12,036,790	13,204,278	13,204,278
211 - Wages and salaries [GFS]	1,010,572	1,059,118	1,110,090
21 - Compensation of employees [GFS]	1,010,572	1,059,118	1,110,090
Use of goods and services	12,036,790	13,204,278	13,204,278
Goods and Services	12,036,790	13,204,278	13,204,278
0120033- Rural Infrastructure Development	181,846	190,217	199,007
	4,585,636	4,585,636	4,585,636
211 - Wages and salaries [GFS]	181,846	190,217	199,007
21 - Compensation of employees [GFS]	181,846	190,217	199,007
311 - Fixed assets	4,585,636	4,585,636	4,585,636

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
Capex	4,585,636	4,585,636	4,585,636
0120034- Urban and Peri - urban Agriculture Support	980,772	1,036,849	1,036,849
Use of goods and services	980,772	1,036,849	1,036,849
Goods and Services	980,772	1,036,849	1,036,849

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 3: INCREASED GROWTH IN INCOMES

SUB-PROGRAMME SP 3.1: Promotion of Crop and Livestock Production

1. Budget Sub-Programme Objective

To increase crop and livestock productivity along the value chain

2. Budget Sub-Programme Description

This sub-programme seeks to increase incomes from livestock and cash crop production by providing extension services and enhanced access to improved seeds, breeding stock and other production inputs along the value chain.

The organizational unit responsible for delivering this sub-programme is the Animal Production Directorate, Veterinary Services Directorate, Crops Services Directorate, Women in Agricultural Development Directorate, Agricultural Engineering Services Directorate, Plant Protection and Regulatory Services Directorate and RADUs with a total number of 1,903 staff.

The beneficiaries of this programme are the farmers and other stakeholders along the value chain. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.) and IGF

The main challenges faced in the delivery of this sub-programme include encroachment on farm lands and the use of waste water for irrigating crops.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Increased number of agricultural technologies	Number of new sustainable agricultural technologies developed	6	6	6	6	6
Increased access to relevant technologies along the value chain	Number of AEA's receiving ToT training on new technologies	1,080	1,866	1,080	1,200	1,400
	Number of FBO's and CBO's trained on new technologies developed	200	300	400	400	400
	Number of agricultural information centers functional	34	50	80	80	80
Improved breeding stock distributed	Number of improved breeds	3816	5456	5558	5894	5952
Post-harvest losses reduced						
Maize	Percentage loss per annum	18.25	18.00	17.50	16.22	15.85
Rice		5.54	5.22	4.64	4.20	3.64
Cassava		25.46	22.45	20.02	17.59	16.45
Yam		21.96	20.45	19.55	18.20	17.33
Sorghum		7.48	6.84	6.20	5.45	4.96

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Production and acquisition of improved breeds	Agricultural Production
National Vaccination Exercise	
Surveillance and Management of Diseases and Pests	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120031- Promotion of cash crop; and livestock production	13,899,876	11,297,359	11,942,323
21 - Compensation of employees [GFS]	6,058,804	2,996,360	3,153,188
Capex	1,154,802	1,235,246	1,412,223
Goods and Services	6,686,270	7,065,753	7,376,912

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 3: INCREASED GROWTH IN INCOMES SUB-PROGRAMME SP 3.2: Strengthening of FBOs and Out-Grower Schemes

1. Budget Sub-Programme Objective

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

2. Budget Sub-Programme Description

This sub-programme 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.

The organizational unit responsible for delivering this sub-programme is the DAES, APD, CSD, and RADUs with a total number of 1,032 staff.

The beneficiaries of this programme are the farmers and other stakeholders along the value chain. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.) and IGF. The main challenges faced in the delivery of this sub-programme include encroachment on farm lands and the use of waste water for irrigating crops.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Out-grower schemes developed and FBOs strengthened	Cumulative out-grower schemes developed	548	610	678	700	725

4. Budget Sub-Program Operations and Projects

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

Operations
Development and management of farmer-based organization.

Projects
No Projects

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120032- Strengthening of FBOs and out - grower schemes	13,047,362	14,263,395	14,314,368
21 - Compensation of employees [GFS]	1,010,572	1,059,118	1,110,090
Goods and Services	12,036,790	13,204,278	13,204,278

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 3: INCREASED GROWTH IN INCOMES

SUB-PROGRAMME SP 3.3: Rural Infrastructure Development

1. Budget Sub-Programme Objective

To develop rural infrastructure to improve agricultural production

2. Budget Sub-Programme Description

This sub-programme 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 production, processing and marketing centres with feeder roads
- Facilitating the establishment of marketing centres and development of rural industrial processing of cash crops and livestock.

The organizational unit responsible for delivering this sub-programme is the DAES, Animal Production Directorate, Veterinary Services Directorate, Crops Services Directorate, Women in Agricultural Development Directorate, Agricultural Engineering Services Directorate, Plant Protection and Regulatory Services Directorate and RADUs with a total number of 1,962 staff.

The beneficiaries of this programme are the farmers and other stakeholders along the value chain. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.) and IGF

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Improved access to production centers	Km of feeder roads constructed/improved (by projects)	100	100	140	180	200
Increased industrial processing of agricultural produce.						
Cassava	Percentage increase in processed produce per annum	4	4	6	8	10
Oil Palm		8	8	8	12	15
Shea nut		6	6	7	9	11
Groundnut		6	6	5	8	12
Soya bean		6	6	6	7	9
Cashew		6	6	6	8	9

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Agricultural Facilities and Infrastructure.	
Agricultural production.	

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120033- Rural Infrastructure Development	4,767,482	4,775,853	4,784,643
21 - Compensation of employees [GFS]	181,846	190,217	199,007
Capex	4,585,636	4,585,636	4,585,636

BUDGET SUB-PROGRAMME SUMMARY

PROGRAMME 3: INCREASED GROWTH IN INCOMES

SUB-PROGRAMME SP 3.4: Urban and Peri - Urban Agricultural Support

1. Budget Sub-Programme Objective

To promote Urban and Peri-Urban agriculture as a source of income

2. Budget Sub-Programme Description

This sub-programme seeks to minimize the risk of health hazards associated with the production and consumption of agricultural produce within Urban and Peri-Urban areas.

The main functions of this sub-programme are 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, processors and traders 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.

The organizational unit responsible for delivering this sub-programme is the Animal Production Directorate, Veterinary Services Directorate, Crops Services Directorate, Women in Agricultural Development Directorate, Agricultural Engineering Services Directorate, Plant Protection and Regulatory Services Directorate and RADUs with a total number of 1,903 staff.

The beneficiaries of this programme are the farmers and other stakeholders along the value chain. The programme is funded mainly by GoG, Donor (CIDA, USAID, GIZ etc.) and IGF

The main challenges faced in the delivery of this sub-programme include encroachment on farm lands and the use of waste water for irrigating crops.

3. Budget Sub-Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Peri-Urban Agricultural yields	Percentage increase in yields	4	4	4	5	5
Farmers practicing Peri-Urban Agriculture	Number of farmers	4010	4520	4590	5200	5540
Adoption of Good Agricultural Practices	Number of farmers	4	4	4	-	-
Zoonotic diseases reduced	Number of animals tested for TB & Brucellosis	2504	2680	3564	3664	3854

4. Budget Sub-Programme Operations and Projects

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

Operations	Projects
Extension Services	No Project

BUDGET BY SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120034- Urban and Peri - urban Agriculture Support	980,772	1,036,849	1,036,849
Goods and Services	980,772	1,036,849	1,036,849

BUDGET PROGRAMME SUMMARY

PROGRAMME 4: MARKETING OF AGRICULTURAL PRODUCE/ PRODUCTS

1. Budget Programme Objectives

To increase competitiveness of agricultural produce and enhance their integration into domestic and international markets.

2. Budget Programme Description

This programme 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
- Advocate for local supermarkets, hotels and restaurants to work with a smallholder production base
- Facilitate the enforcement of 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 programmes to support the certification of smallholders for export markets;
- Developing effective processing and packaging systems for crops and livestock;
- Developing branding of Ghanaian produce for international markets
- Building capacity and resourcing relevant stakeholders for international Trade negotiations.

The operations involved in grading and standardization are:

- Developing and promoting the adoption of grading and standardization systems for all commodities for both domestic and export markets; and
- Collaborating with relevant agencies in enforcing laws and regulating on standards and grading.

The organizational unit responsible for delivering this programme is the PPRSD, WIAD, VSD, CSD, APD, SRID and RADU with a total number of 1,887 Staff. The beneficiaries of this programme are the producers, processors, traders, exporters, and other stakeholders. The programme is funded mainly by GoG, Donor (CIDA, AfDB, GIZ etc.) and IGF.

The main challenges to domestic market access include:

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

3. Budget Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Increased Export of Non-traditional agricultural commodities	Quality (mt) of Non-traditional agricultural Commodities Exported	567,2000	679,452	835,726	962,652	1,096,915
	Percentage in value of non-traditional agricultural export commodities	10.75	19.79	23.00	30.10	36.22

4. Budget Programme Operations and Projects

The table lists the main Operations and Projects to be undertaken by the programme.

Operations
Agric. Education.
Research and development.

Projects
No Project

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year	Indicative Year
012004 - Marketing of Agricultural Produce/Products	35,350	12,600	12,600
0120040- Agricultural Produce Marketing	35,350	12,600	12,600
Use of goods and services	35,350	12,600	12,600
Goods and Services	35,350	12,600	12,600

BUDGET PROGRAMMME SUMMARY

PROGRAMME 5: MANAGEMENT OF LAND AND ENVIRONMENT

1. Budget Programme 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 Programme Description

This programme facilitates the implementation of sustainable land and environmental management (SLEM) practices in agriculture. It approaches this task by promoting SLEM technologies; creating awareness and building locally based institutional capacity by setting and monitoring a supporting policy environment.

The main operations are;

- Establishing cross-sector SLEM coordination mechanisms at all levels.
- Establishing mechanisms for joint planning and implementation for SLEM at all levels.
- Enhancing the capacities of private extension service providers in approaches to climate change adaptation and mitigation processes
- Developing and pilot a SLEM based farmer-field-school curriculum
- Integrating SLEM principles into curriculum of Agriculture Colleges.
- 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 and SLEM practices.

The organizational units responsible for delivering this programme are Crop Services Directorate and the 10 Regional Agricultural Development Units with a total number of 745 Staff.

The beneficiaries of this programme are farmers and other key stakeholders in the agricultural sector. The programme is funded mainly by GoG and Donor (CIDA, FAO, WB, etc.)

The main challenges faced in the delivery of this programme are

- Weak policy environment for sustainable land management at the community level,
- Low capacity at all levels for implementation of SLEM policies,
- Low adoption of SLEM technologies at community level, and
- Weak collaboration of relevant agencies to ensure SLEM mainstreaming.

3. Budget Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Policies, laws and regulations reviewed	Number of reviews per year	4	4	4	4	4
Monitoring visits undertaken to ensure compliance (per district)	Number per District per year	4	4	4	4	4
Bushfire control	Number of major outbreaks controlled	5	5	5	5	5
Area under conservation (protected areas)	Hectares	37,463	37,463	37,463	37,463	37,463
Participatory land use management plans developed at all levels	No of plans developed	5	5	5	5	5
Training and Awareness programmes on SLEM	Number of private extension service providers trained	40	40	40	40	40
	Number of awareness programmes organized	4	4	4	4	4
Adoption of SLEM practices by farmers (percentages)	Number of farmers	-	-	1	-	1
Incentive system (grants and scheme) for SLEM service providers	Number of service providers/beneficiaries covered	-	70	80	70	80

4. Budget Program Operations and Projects

The table lists the main Operations and Projects to be undertaken by the programme.

Operations	Projects
Sustainable Land and water management	No Projects

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATUARL ACCOUNT

	Budget
012005 - Management of Land and Environment	10,000
0120050- Agricultural Land Management	10,000
Use of goods and services	10,000
Goods and Services	10,000

BUDGET PROGRAMME SUMMARY

PROGRAMME 6: APPLICATION OF SCIENCE AND TECHNOLOGY IN FOOD AND AGRICULTURAL DEVELOPMENT

1. Budget Programme Objectives

To enhance the adoption of agricultural technologies along the value chain

2. Budget Programme Description

This programme facilitates adoption of improved technologies by building capacity for technology research and application, enhancing access to research information and findings, and developing sustainable funding mechanisms for agricultural research.

The key operations of this programme are detailed below;

Improve participatory research: This involves

- Identifying and maintaining a register of all key stakeholders in the agriculture value chain (database)
- Engaging 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.
- Facilitating the intensification of field demonstrations, farmer field schools, and field days/study tours to encourage the adoption of improved technologies.
- Strengthening 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 through the following:

- Conducting and facilitating adaptive trials, farmer field fora, Durbars and exhibitions focused on sector stakeholders;
- Organizing consultative fora 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;
- Conducting on-farm research on low cost, appropriate technologies and developing/delivering these technologies as packages
- Researching into improved crop varieties and breeding stock and feedstuffs.
- Developing new food products and equipment.

Enhance access to agricultural research information – The programme 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 programme.

- 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 –The programme seeks to address this issue by:

- Dialoguing with DPs and Ministry of Finance 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.

The organizational unit responsible for delivering this programme is Directorate of Agricultural Extension Services, Women in Agricultural Development, Crop Services Directorate, Plant Protection and Regulatory Services Directorate and Animal Production Directorate with a total number of 442 Staff.

The beneficiaries of this programme are clients of the Ministry and these include farmers, FBOs, processors, youth, etc in the agricultural sector. The programme is funded mainly by GoG, Donor (WB, AusAID, GAC, etc.).

The main challenges faced in the delivery of this programme are low ratio of agricultural extension officers to farmers, aging extension officers and low interest of the youth in agriculture.

3. Budget Programme Results Statement

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

Main Outputs	Output Indicator	Past Years		Projections		
		2014	2015	Budget Year 2016	Indicative Year 2017	Indicative Year 2018
Adoption of improved technologies along the value chain	Rate of adoption	10%	5%	5%	5%	5%
Regulatory framework for biotechnology established	Number of regulations passed	1	1	1	1	1

4. Budget Programme Operations and Projects

The table lists the main Operations and Projects to be undertaken by the programme.

Operations
Operations of Agricultural research stations.
Surveillance and Management of Diseases and Pests.
Extension services.
Production of Extension materials and services.

Projects
Agricultural Production.

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	T	Indicative Year	Indicative Year
012006 - Application of Science and Technology in Food and	51,887,284	52,149,442	52,149,442
	3,544,164	3,806,322	3,806,322
0120060- Science and Technology in Agricultural Production	48,343,120	48,343,120	48,343,120
Use of goods and services	3,544,164	3,806,322	3,806,322
Goods and Services	3,544,164	3,806,322	3,806,322
311 - Fixed assets	48,343,120	48,343,120	48,343,120
Capex	48,343,120	48,343,120	48,343,120

APPENDICES

BUDGET BY PROGRAMME, COST CENTER, ECONOMIC ITEM AND FUNDING

	GoG				IGF				Funds / Others			Donors		
	Compensation of employees	Goods and Services	Capex	Total	Compensation of employees	Goods and Services	Capex	Total	Statutory	ABF A	Others	Goods and Services	Capex	Total
012 - Ministry of Food and Agriculture (MOFA)	57,042,535	2,733,788		59,776,323		2,810,326	1,255,324	4,065,650		262,317,904		60,102,522	115,239,309	175,341,831
01201 - Finance and Administration	1,125,699	825,763		1,951,462						3,000,000		3,802,615	14,807,742	18,610,357
0120101001 - Office of the Minister	1,125,699	112,500		1,238,199										
0120101002 - Office of the Chief Director		165,545		165,545								2,540,543	9,900,620	12,441,163
0120101003 - Savelugu		505,000		505,000						3,000,000		1,262,072	4,907,122	6,169,194
0120102001 - Admin		42,718		42,718										
01202 - Policy Planning Monitoring and Evaluation	1,492,574	387,750		1,880,324								25,003,600	50,555,772	75,559,372
0120201001 - PPME Secretariat	1,492,574	387,750		1,880,324								25,003,600	50,555,772	75,559,372
01203 - Human Resource Development Management	10,972,222	205,000		11,177,222		166,235		166,235						
0120301001 - Gen. Admin	463,647	70,000		533,647		166,235		166,235						
0120302001 - Kwadaso Agricultural College	2,155,113	20,000		2,175,113										
0120303001 - Ohawu Agric College	2,291,318	17,500		2,308,818										
0120304001 - Damango Agricultural College	1,528,779	20,000		1,548,779										
0120305001 - Ejura Agricultural College	1,494,893	15,000		1,509,893										
0120306001 - Animal Health and Production College	1,858,386	25,000		1,883,386										
0120307001 - Wenchi Farm Institutet	459,183	12,500		471,683										
0120308001 - Adidome Farm Institute	262,263	10,000		272,263										
0120309001 - Asuasi Farm Institute	458,641	15,000		473,641										
01204 - Statistics Research and Information Dept	901,783	70,000		971,783										
0120401001 - Gen. Admin	901,783	70,000		971,783										
01205 - Crop Services Directorate	1,945,289	112,500		2,057,789						198,615,132		12,608,748	910,942	13,519,690
0120501001 - Gen. Admin	1,150,692	62,500		1,213,192						198,615,132		12,608,748	910,942	13,519,690
0120502001 - Asuansi Agric Research Station	187,035	10,000		197,035										
0120503001 - Mampong Agric Research Station	179,050	10,000		189,050										
0120504001 - Wenchi Agric Research Station	222,219	10,000		232,219										
0120505001 - Babile Agric Research Station	55,062	10,000		65,062										

BUDGET BY PROGRAMME, COST CENTER , ECONOMIC ITEM AND FUNDING

	GoG				IGF				Funds / Others			Donors			
	Compensation of employees	Goods and Services	Capex	Total	Compensation of employees	Goods and Services	Capex	Total	Statutory	ABFA	Others	Goods and Services	Capex	Total	
0120506001 - Kpeve Agricultural Research Station	151,230	10,000		161,230											161,230
01206 - Directorate of Agric. Extension Services.	1,010,572	65,802		1,076,374											1,076,374
0120601001 - Gen. Admin	1,010,572	65,802		1,076,374											1,076,374
01207 - Plant Protection & Regulatory Services (PPRS)	1,075,245	50,970		1,126,215		683,961	316,048	1,000,009							2,126,224
0120701001 - Gen. Admin	1,075,245	50,970		1,126,215		683,961	316,048	1,000,009							2,126,224
01208 - Animal Production Directorate	2,847,607	203,500		3,051,107		452,954		452,954							3,504,061
0120801001 - Gen. Admin	671,390	63,500		734,890		452,954		452,954							1,187,844
0120802001 - Nungua Livestock Breeding Station	414,611	20,000		434,611											434,611
0120803001 - Amrahia Dairy Farm	588,240	20,000		608,240											608,240
0120804001 - Ejura Sheep Breeding Station	337,650	20,000		357,650											357,650
0120805001 - Kintampo Goat Breeding Station	292,880	20,000		312,880											312,880
0120806001 - Pong Tamale Livestock Breeding Station	402,730	20,000		422,730											422,730
0120807001 - Babile Piggrey Station	140,106	20,000		160,106											160,106
0120808001 - Nkwanta Livestock Station		20,000		20,000											20,000
01209 - Women in Agric. Development Department (WIAD)	480,811	51,200		532,011											532,011
0120901001 - Gen. Admin	480,811	51,200		532,011											532,011
01210 - Agric. Engineering Services Dept.	1,001,232	63,706		1,064,938											1,064,938
0121001001 - Gen. Admin	967,285	63,706		1,030,991											1,030,991
0121002001 - Atebubu Agric Service Station	33,947			33,947											33,947
01211 - Veterinary Services Dept. (Central Administration)	16,782,782	108,261		16,891,043		1,207,885	804,440	2,012,325							18,903,368
0121101001 - Gen. Admin	16,782,782	54,761		16,837,543		1,207,885	804,440	2,012,325							18,849,868
0121102001 - Disease Investigation Farm, Techiman		28,500		28,500											28,500
0121103001 - Disease Investigation Farm, Savelugu		25,000		25,000											25,000
01212 - Greater Accra Agric Dev	1,146,623	30,000		1,176,623											1,176,623
0121201001 - Accra Regional Directorate	1,146,623	30,000		1,176,623											1,176,623
01213 - Volta Regional Agric Dev. Unit	845,312	30,000		875,312											875,312

BUDGET BY PROGRAMME, COST CENTER , ECONOMIC ITEM AND FUNDING

	GoG				IGF				Funds / Others			Donors			
	Compensation of employees	Goods and Services	Capex	Total	Compensation of employees	Goods and Services	Capex	Total	Statutory	ABFA	Others	Goods and Services	Capex	Total	
0121301001 - Volta Regional Directorate	845,312	30,000		875,312											875,312
01214 - Eastern Regional Agric Dev. Unit	595,083	30,000		625,083											625,083
0121401001 - Eastern Regional Directorate	595,083	30,000		625,083											625,083
01215 - Central Regional Agric Dev. Unit	827,997	30,000		857,997											857,997
0121501001 - Central Regional Directorate	827,997	30,000		857,997											857,997
01216 - Western Regional Agric Dev. Unit	836,578	30,000		866,578											866,578
0121601001 - Western Regional Directorate	836,578	30,000		866,578											866,578
01217 - Ashanti Regional Agric Dev. Unit	1,436,017	30,000		1,466,017											1,466,017
0121701001 - Ashanti Regional Directorate	1,436,017	30,000		1,466,017											1,466,017
01218 - B-Ahafo Regional Agric Dev. Unit	784,967	30,000		814,967											814,967
0121801001 - Brong Ahafo Regional Directorate	784,967	30,000		814,967											814,967
01219 - Northern Regional Agric Dev. Unit	1,276,515	75,000		1,351,515								18,385,904	47,801,650	66,187,554	67,539,069
0121901001 - Northern Regional Directorate	1,276,515	30,000		1,306,515											1,306,515
0121901002 - MOFA_Northern Regional Agric Dev. Unit												18,385,904	47,801,650	66,187,554	66,187,554
0121901003 - Central Laboratory, Pong Temale		25,000		25,000											25,000
0121901004 - Tsetse Control Program		20,000		20,000											20,000
01220 - U-East Regional Agric Dev. Unit	855,875	30,000		885,875											885,875
0122001001 - Upper East Regional Directorate	855,875	30,000		885,875											885,875
01221 - U-West Regional Agric Dev. Unit	840,210	30,000		870,210											870,210
0122101001 - Upper West Region Directorate	840,210	30,000		870,210											870,210
01232 - NORRIP	181,846			181,846											181,846
0123201001 - Gen. Admin	181,846			181,846											181,846
01233 - ONCHO		37,500		37,500											37,500
0123301001 - MoFA_ONCHO General Administration		37,500		37,500											37,500
01250 - Ghana Irrigation Development Authority	4,471,161	80,000		4,551,161						60,702,772		301,655	1,163,203	1,464,858	66,718,791
0125001001 - Headquarters	4,471,161	80,000		4,551,161						60,702,772		301,655	1,163,203	1,464,858	66,718,791

BUDGET BY PROGRAMME, COST CENTER, ECONOMIC ITEM AND FUNDING

	GoG				IGF				Funds / Others			Donors			Grand Total
	Compensation of employees	Goods and Services	Capex	Total	Compensation of employees	Goods and Services	Capex	Total	Statutory	ABFA	Others	Goods and Services	Capex	Total	
01251 - Irrigation Company of Upper Region	1,493,580	29,286		1,522,866		144,044	96,019	240,063							1,762,929
0125101001 - Gen. Admin	1,493,580	29,286		1,522,866		144,044	96,019	240,063							1,762,929
01252 - Grains and Legumes Dev. Board	1,512,707	50,050		1,562,757		155,247	38,817	194,064							1,756,821
0125201001 - Gen. Admin	1,512,707	50,050		1,562,757		155,247	38,817	194,064							1,756,821
01253 - Vertirinary Council	88,158	10,000		98,158											98,158
0125301001 - Gen. Admin	88,158	10,000		98,158											98,158
01255 - Ghana Permanent Representative in Rome	214,089	37,500		251,589											251,589
0125501001 - Gen. Admin	214,089	37,500		251,589											251,589

BUDGET BY PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
Programmes - Ministry of Food and Agriculture (MOFA)	501,501,707	519,365,270	544,452,954
012001 - Management and Administration	27,837,619	24,795,974	25,241,989
21 - Compensation of employees [GFS]	14,706,367	14,873,331	15,268,661
Capex	9,751,203	7,751,203	7,751,203
Goods and Services	3,380,049	2,171,440	2,222,125
012002 - Food Security and Emergency Preparedness	389,035,962	411,033,797	434,970,740
21 - Compensation of employees [GFS]	35,084,945	36,851,735	38,689,645
Capex	151,362,644	158,715,783	158,750,548
Goods and Services	202,588,372	215,466,280	237,530,546
012003 - Increased Growth in Incomes	32,695,492	31,373,457	32,078,183
21 - Compensation of employees [GFS]	7,251,222	4,245,695	4,462,285
Capex	5,740,438	5,820,882	5,997,859
Goods and Services	19,703,832	21,306,880	21,618,039
012004 - Marketing of Agricultural Produce/Products	35,350	12,600	12,600
21 - Compensation of employees [GFS]			
Capex			
Goods and Services	35,350	12,600	12,600
012005 - Management of Land and Environment	10,000		
21 - Compensation of employees [GFS]			
Capex			
Goods and Services	10,000		

BUDGET BY PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
012006 - Application of Science and Technology in Food and Agric Development	51,887,284	52,149,442	52,149,442
21 - Compensation of employees [GFS]			
Capex	48,343,120	48,343,120	48,343,120
Goods and Services	3,544,164	3,806,322	3,806,322

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
Programmes - Ministry of Food and Agriculture (MOFA)	501,501,707	519,365,270	544,452,954
012001 - Management and Administration	27,837,619	24,795,974	25,241,989
0120011 - Finance and Administration	9,207,517	5,850,124	5,908,267
21 - Compensation of employees [GFS]	1,339,788	1,181,073	1,239,217
211 - Wages and salaries [GFS]	1,339,788	1,181,073	1,239,217
311 - Fixed assets	5,893,373	3,893,373	3,893,373
Capex	5,893,373	3,893,373	3,893,373
Goods and Services	1,974,356	775,677	775,677
Use of goods and services	1,974,356	775,677	775,677
0120012- Human Resource Development and Management	11,343,457	11,521,190	11,786,190
21 - Compensation of employees [GFS]	10,972,222	11,176,331	11,390,646
211 - Wages and salaries [GFS]	10,972,222	11,176,331	11,390,646
Goods and Services	371,235	344,859	395,544
Use of goods and services	371,235	344,859	395,544
0120013- Policy; Planning; Budgeting; Monitoring and Evaluation	6,314,862	6,474,377	6,551,099
21 - Compensation of employees [GFS]	1,492,574	1,565,643	1,642,365
211 - Wages and salaries [GFS]	1,492,574	1,565,643	1,642,365
311 - Fixed assets	3,857,830	3,857,830	3,857,830
Capex	3,857,830	3,857,830	3,857,830
Goods and Services	964,458	1,050,904	1,050,904
Use of goods and services	964,458	1,050,904	1,050,904

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120014 - Research, Statistics, Information, Communication and Public Relations	971,783	950,284	996,433
21 - Compensation of employees [GFS]	901,783	950,284	996,433
211 - Wages and salaries [GFS]	901,783	950,284	996,433
Goods and Services	70,000		
Use of goods and services	70,000		
012002 - Food Security and Emergency Preparedness	389,035,962	411,033,797	434,970,740
0120021 - Productivity improvement.	303,794,351	325,435,054	349,059,119
21 - Compensation of employees [GFS]	29,131,742	30,604,774	32,134,052
211 - Wages and salaries [GFS]	29,131,742	30,604,774	32,134,052
311 - Fixed assets	82,342,435	89,695,574	89,730,339
Capex	82,342,435	89,695,574	89,730,339
Goods and Services	192,320,175	205,134,706	227,194,727
Use of goods and services	192,320,175	205,134,706	227,194,727
0120022 - Mechanization, Irrigation and water management	66,671,849	66,805,059	67,088,449
21 - Compensation of employees [GFS]	5,472,393	5,742,109	6,025,499
211 - Wages and salaries [GFS]	5,472,393	5,742,109	6,025,499
311 - Fixed assets	60,983,062	60,983,062	60,983,062
Capex	60,983,062	60,983,062	60,983,062
Goods and Services	216,394	79,888	79,888
Use of goods and services	216,394	79,888	79,888
0120023 - Food storage, distribution and improved nutrition	8,273,513	8,300,154	8,328,256

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
21 - Compensation of employees [GFS]	480,811	504,852	530,094
211 - Wages and salaries [GFS]	480,811	504,852	530,094
Goods and Services	7,792,702	7,795,302	7,798,162
Use of goods and services	7,792,702	7,795,302	7,798,162
0120024- Early warning systems and emergency preparedness.	25,000		
Goods and Services	25,000		
Use of goods and services	25,000		
0120025- Diversification of livelihood options	10,271,249	10,493,530	10,494,916
311 - Fixed assets	8,037,147	8,037,147	8,037,147
Capex	8,037,147	8,037,147	8,037,147
Goods and Services	2,234,102	2,456,383	2,457,769
Use of goods and services	2,234,102	2,456,383	2,457,769
012003 - Increased Growth in Incomes	32,695,492	31,373,457	32,078,183
21 - Compensation of employees [GFS]	7,251,222	4,245,695	4,462,285
211 - Wages and salaries [GFS]	7,251,222	4,245,695	4,462,285
311 - Fixed assets	5,740,438	5,820,882	5,997,859
Capex	5,740,438	5,820,882	5,997,859
Goods and Services	19,703,832	21,306,880	21,618,039
Use of goods and services	19,703,832	21,306,880	21,618,039
0120031- Promotion of cash crop; and livestock production	13,899,876	11,297,359	11,942,323
21 - Compensation of employees [GFS]	6,058,804	2,996,360	3,153,188

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
211 - Wages and salaries [GFS]	6,058,804	2,996,360	3,153,188
311 - Fixed assets	1,154,802	1,235,246	1,412,223
Capex	1,154,802	1,235,246	1,412,223
Goods and Services	6,686,270	7,065,753	7,376,912
Use of goods and services	6,686,270	7,065,753	7,376,912
0120032- Strengthening of FBOs and out - grower schemes	13,047,362	14,263,395	14,314,368
21 - Compensation of employees [GFS]	1,010,572	1,059,118	1,110,090
211 - Wages and salaries [GFS]	1,010,572	1,059,118	1,110,090
Goods and Services	12,036,790	13,204,278	13,204,278
Use of goods and services	12,036,790	13,204,278	13,204,278
0120033- Rural Infrastructure Development	4,767,482	4,775,853	4,784,643
21 - Compensation of employees [GFS]	181,846	190,217	199,007
211 - Wages and salaries [GFS]	181,846	190,217	199,007
311 - Fixed assets	4,585,636	4,585,636	4,585,636
Capex	4,585,636	4,585,636	4,585,636
0120034- Urban and Peri - urban Agriculture Support	980,772	1,036,849	1,036,849
Goods and Services	980,772	1,036,849	1,036,849
Use of goods and services	980,772	1,036,849	1,036,849
012004 - Marketing of Agricultural Produce/Products	35,350	12,600	12,600
Goods and Services	35,350	12,600	12,600
Use of goods and services	35,350	12,600	12,600

BUDGET BY PROGRAMME, SUB-PROGRAMME AND NATURAL ACCOUNT

	Budget	Indicative Year 1	Indicative Year 2
0120040- Agricultural Produce Marketing	35,350	12,600	12,600
Goods and Services	35,350	12,600	12,600
Use of goods and services	35,350	12,600	12,600
012005 - Management of Land and Environment	10,000		
Goods and Services	10,000		
Use of goods and services	10,000		
0120050- Agricultural Land Management	10,000		
Goods and Services	10,000		
Use of goods and services	10,000		
012006 - Application of Science and Technology in Food and Agric Development	51,887,284	52,149,442	52,149,442
311 - Fixed assets	48,343,120	48,343,120	48,343,120
Capex	48,343,120	48,343,120	48,343,120
Goods and Services	3,544,164	3,806,322	3,806,322
Use of goods and services	3,544,164	3,806,322	3,806,322
0120060- Science and Technology in Agricultural Production	51,887,284	52,149,442	52,149,442
311 - Fixed assets	48,343,120	48,343,120	48,343,120
Capex	48,343,120	48,343,120	48,343,120
Goods and Services	3,544,164	3,806,322	3,806,322
Use of goods and services	3,544,164	3,806,322	3,806,322

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015			2016	2017	FY18	
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
Programmes - Ministry of Food and Agriculture (MOFA)	113,244,212	411,821,430	48,275,304			501,501,707	519,365,270	544,452,954
012001 - Management and Administration	60,453,370	22,891,507	4,042,528			27,837,619	24,795,974	25,241,989
0120011 - Finance and Administration	50,430,844	7,284,789	20,296			9,207,517	5,850,124	5,908,267
Employees Compensation		811,118				1,339,788	1,181,073	1,239,217
012001 - Agricultural Facilities and Infrastructure		3,557,146				2,000,000		
012004 - Development and Management of Farmer-based organisations						68,125		
012007 - Plants Fertilizer and Seed Management	46,319,026							
012011 - Agric Education	2,193,750							
085101 - Internal management of the organisation	176,958	1,506,089	11,319			596,169		
085102 - Local & international affiliations	557,300	500,000				230,000		
085301 - Budget Preparation						40,250		
085402 - Tendering Activities		25,000				3,629,216	3,669,050	3,669,050
085501 - Internal Audit Operations		50,000				25,001		
085601 - Planning and Policy Formulation						68,125		
085701 - Management and Monitoring Policies, Programmes and Projects	264,676					68,125		
085801 - Research and Development						75,000		
085802 - Development and Management of Database		220,000						

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015			2016	2017	FY18	
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
085901 - Treasury and Accounting Activities	505,261	75,436	7,821					
085903 - Preparation of Financial Reports		10,000	1,156			42,718		
086101 - Software Acquisition and Development						10,000		
086102 - Computer hardwares and accessories		500,000						
086104 - Technology Transfer						1,000,000	1,000,000	1,000,000
086203 - Information, Education and Communication	164,996							
086204 - publication, campaigns and programmes	230,000							
086301 - Maintenance, Rehabilitation, Refurbishment and	18,877							
086401 - Library Services		20,000				10,000		
086501 - Legal and Administrative Framework		10,000				5,000		
0120012- Human Resource Development and	9,253,094	13,481,806	3,985,862			11,343,457	11,521,190	11,786,190
Employees Compensation	9,119,220	12,890,325	3,973,600			10,972,222	11,176,331	11,390,646
012011 - Agric Education		260,000	12,262			301,235	344,859	395,544
085101 - Internal management of the organisation	27,175							
085103 - Procurement of Office supplies and		10,000						
085202 - Human Resource Database		60,000				50,000		
085204 - Recruitment, Placement and Promotions		80,000				12,500		

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
085206 - Manpower Skills Development	106,699	181,481				7,500		
0120013- Policy; Planning; Budgeting; Monitoring and Evaluation	616,435	1,446,987	36,370			6,314,862	6,474,377	6,551,099
Employees Compensation	327,554	1,091,487	36,370			1,492,574	1,565,643	1,642,365
012001 - Agricultural Facilities and Infrastructure						3,857,830	3,857,830	3,857,830
085301 - Budget Preparation	8,000	57,500						
085302 - Budget Performance Reporting		23,000						
085601 - Planning and Policy Formulation		40,000						
085602 - Publication and dissemination of Policies and Programmes		20,000						
085603 - Policies and Programme Review Activities		13,000						
085701 - Management and Monitoring Policies, Programmes and Projects		50,000				964,458	1,050,904	1,050,904
085702 - Evaluation and Impact Assessment Activities		2,000						
085801 - Research and Development		150,000						
086203 - Information, Education and Communication	160,886							
086301 - Maintenance, Rehabilitation ,Refurbishment and Upgrade of existing Assets	47,709							
086302 - Acquisition of Immovable and Movable Assets	30,785							
086404 - Information Management	41,500							
0120014 - Research, Statistics, Information, Communication and	152,996	677,925				971,783	950,284	996,433

BUDGT BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
Employees Compensation		630,925				901,783	950,284	996,433
085301 - Budget Preparation	3,597							
085701 - Management and Monitoring Policies, Programmes and Projects	54,000							
085801 - Research and Development	35,000	47,000						
085802 - Development and Management of Database						70,000		
086203 - Information, Education and Communication	53,000							
086301 - Maintenance, Rehabilitation, Refurbishment and Upgrade of existing Assets	7,400							
012002 - Food Security and Emergency Preparedness	35,458,517	337,882,871	43,389,128			389,035,962	411,033,797	434,970,740
0120021 - Productivity improvement.	4,573,827	260,532,023	21,538,819			303,794,351	325,435,054	349,059,119
Employees Compensation	2,742,575	26,982,292	994,115			29,131,742	30,604,774	32,134,052
012001 - Agricultural Facilities and Infrastructure		9,947,720				33,773,434	36,305,202	36,305,202
012002 - Operations of Agriculture Research stations	35,577	100,000				50,000		
012003 - National strategic stock programmes		217,180	15,561					
012004 - Development and Management of Farmer-based organisations		77,000,000				66,187,554	72,806,309	72,806,309
012005 - Sustainable Land and Water Management		368,469				469,030	515,933	515,933
012006 - National Fruit Fly management		101,940						
012007 - Plants Fertilizer and Seed Management	16,651	139,000,000	20,400,000			163,615,132	173,615,132	195,615,132

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015			2016	2017	FY18	
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
012008 - Production and acquisition of improved breeds		10,500						
012009 - National Vaccination exercise	29,228							
012010 - Surveillance and Management of Diseases and Pests	4,572	1,395,917			1,020,009	1,099,642	1,194,428	
012011 - Agric Education	72,663	30,855						
012012 - Extension Services		1,672,360						
012014 - Agricultural Production	114,689	3,674,790	129,143		8,906,499	9,839,074	9,839,074	
085101 - Internal management of the organisation		15,000						
085601 - Planning and Policy Formulation	27,535							
085701 - Management and Monitoring Policies, Programmes and Projects	262,510							
085901 - Treasury and Accounting Activities	15,811							
086203 - Information, Education and Communication	38,903							
086204 - publication, campaigns and programmes	82,009							
086301 - Maintenance, Rehabilitation, Refurbishment and	168,295				560,580	560,580	560,580	
086302 - Acquisition of Immovable and Movable Assets	962,810							
086304 - Cleaning and General Services		15,000						
086901 - Food Security					80,371	88,408	88,408	
0120022 - Mechanization, Irrigation and water management	29,602,573	69,685,479	19,240,605		66,671,849	66,805,059	67,088,449	

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
Employees Compensation	5,694,745	6,496,013	3,196,651			5,472,393	5,742,109	6,025,499
012001 - Agricultural Facilities and Infrastructure	1,715,425	10,327,412				343,996	280,290	280,290
012005 - Sustainable Land and Water Management		52,862,054	16,043,953			60,782,772	60,702,772	60,702,772
012014 - Agricultural Production						72,688	79,888	79,888
085101 - Internal management of the organisation	39,232							
085206 - Manpower Skills Development	89,391							
085801 - Research and Development	157,000							
086301 – Maintenance ,Rehabilitation, Refurbishment and Upgrade of existing Assets	6,756,192							
086302 - Acquisition of Immovable and Movable Assets	15,136,958							
086402 - Printing and Dissemination of Information	13,631							
0120023 - Food storage, distribution and improved nutrition	6,200	6,940,502				8,273,513	8,300,154	8,328,256
Employees Compensation		347,331				480,811	504,852	530,094
012001 - Agricultural Facilities and Infrastructure		3,212,156						
012011 - Agric Education		35,001				26,000	28,600	31,460
012014 - Agricultural Production		3,346,014						
086301 – Maintenance ,Rehabilitation ,Refurbishment and Upgrade of existing Assets	6,200							
086901 - Food Security						7,766,702	7,766,702	7,766,702

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015			2016	2017	FY18	
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
0120024- Early warning systems and emergency preparedness.	1,254,646	88,167	2,609,704			25,000		
Employees Compensation	822,230		2,594,201					
012009 - National Vaccination exercise	60,000	50,000	15,503			25,000		
012010 - Surveillance and Management of Diseases and Pests	177,114	38,167						
086203 - Information, Education and Communication	25,063							
086204 - publication, campaigns and programmes	84,225							
086402 - Printing and Dissemination of Information	86,014							
0120025- Diversification of livelihood options	21,271	636,700				10,271,249	10,493,530	10,494,916
012001 - Agricultural Facilities and Infrastructure						8,037,147	8,037,147	8,037,147
012011 - Agric Education		31,901				12,600	13,860	15,246
012012 - Extension Services		42,144						
012014 - Agricultural Production	4,553					11,286	11,286	11,286
085205 - Personnel and Staff Management		562,655						
086203 - Information, Education and Communication	16,718							
086901 - Food Security						200,929	221,022	221,022
086902 - Nutritional Programmes						2,009,287	2,210,215	2,210,215
012003 - Increased Growth in Incomes	16,391,587	21,291,487	703,451			32,695,492	31,373,457	32,078,183

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRV	V_APRVD			
0120031- Promotion of cash crop; and livestock production	15,720,745	16,893,866	703,451			13,899,876	11,297,359	11,942,323
Employees Compensation	12,111,626	2,826,281	695,837			6,058,804	2,996,360	3,153,188
012001 - Agricultural Facilities and Infrastructure						350,362	350,362	350,362
012005 - Sustainable Land and Water Management	3,429,666							
012008 - Production and acquisition of improved breeds		4,457,000	7,614			681,454	499,954	477,954
012010 - Surveillance and Management of Diseases and		57,000				2,105,586	2,334,346	2,725,682
012014 - Agricultural Production	43,519	9,553,585				4,703,670	5,116,337	5,235,137
085701 - Management and Monitoring Policies, Programmes and Projects	35,000							
086203 - Information, Education and Communication	45,919							
086204 - publication, campaigns and programmes	9,395							
086301 - Maintenance, Rehabilitation, Refurbishment and Upgrade of existing Assets	45,621							
0120032- Strengthening of FBOs and out - grower schemes	670,842	3,450,000				13,047,362	14,263,395	14,314,368
Employees Compensation						1,010,572	1,059,118	1,110,090
012004 - Development and Management of Farmer-based organisations	99,939	3,450,000				12,003,889	13,204,278	13,204,278
012012 - Extension Services						32,901		
086302 - Acquisition of Immovable and Movable Assets	570,903							
0120033- Rural Infrastructure Development		877,621				4,767,482	4,775,853	4,784,643

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRVD	V_APRVD			
Employees Compensation		277,621				181,846	190,217	199,007
012001 - Agricultural Facilities and Infrastructure		600,000				3,781,921	3,781,921	3,781,921
086901 - Food Security						803,715	803,715	803,715
0120034- Urban and Peri - urban Agriculture Support		70,000				980,772	1,036,849	1,036,849
012004 - Development and Management of Farmer-based organisations						980,772	1,036,849	1,036,849
012011 - Agric Education		30,000						
012012 - Extension Services		20,000						
012013 - Production of Extension materials and services		20,000						
012004 - Marketing of Agricultural Produce/Products	45,546	108,500	46,639			35,350	12,600	12,600
0120040- Agricultural Produce Marketing	45,546	108,500	46,639			35,350	12,600	12,600
012011 - Agric Education		5,500				12,600	12,600	12,600
012014 - Agricultural Production						22,750		
085101 - Internal management of the organisation	45,546							
085801 - Research and Development		103,000	46,639					
012005 - Management of Land and Environment		96,521				10,000		
0120050- Agricultural Land Management		96,521				10,000		
Employees Compensation		91,521						

BUDGET BY MDA, PROGRAMME AND OPERATION

	2014	2015				2016	2017	FY18
	Actual	Budget	Actual	Budget Balance		Budget	Indicative	Indicative
				V_APRVD	V_APRVD			
012005 - Sustainable Land and Water Management		5,000				10,000		
012006 - Application of Science and Technology in Food and Agric	895,192	29,550,545	93,558			51,887,284	52,149,442	52,149,442
0120060- Science and Technology in Agricultural Production	895,192	29,550,545	93,558			51,887,284	52,149,442	52,149,442
Employees Compensation	834,875	717,590	73,158					
012001 - Agricultural Facilities and Infrastructure						35,000,000	35,000,000	35,000,000
012002 - Operations of Agriculture Research stations	60,317	28,791,351						
012003 - National strategic stock programmes						50,970		
012012 - Extension Services		41,604	20,400			3,493,194	3,806,322	3,806,322
012013 - Production of Extension materials and services						13,343,120	13,343,120	13,343,120

BUDGET BY MDA, PROGRAMME AND PROJECT

	2014	2015		2016	2017	FY18	
	Actual	Budget	Budget Balance		Budget	Indicative	Indicative
			V_APRVD	V_APRVD			
2120114 - Administrative Support				397,750			
2120214 - Construction and Rehabilitation works				2,000,000			
0120011 - Finance and Administration	50,430,844	7,284,789		9,207,517	5,850,124	5,908,267	
0120014 - Research, Statistics, Information, Communication and Public	152,996	677,925		971,783	950,284	996,433	
012001 - Management and Administration	60,453,370	22,891,507		27,837,619	24,795,974	25,241,989	
2121114 - Agricultural Input Project -Subsidy		139,000,000		163,615,132	173,615,132	195,615,132	
2121314 - Root and Tuber and Programme		2,443,051		705,956	710,494	710,494	
0120021 - Productivity improvement.	4,573,827	260,532,023		303,794,351	325,435,054	349,059,119	
2121714 - Construction of Irrigation Dam Infrastructure		9,000,000					
0120022 - Mechanization, Irrigation and water management	29,602,573	69,685,479		66,671,849	66,805,059	67,088,449	
2122114 - Rice Sector support project		3,346,014		7,766,702	7,766,702	7,766,702	
0120023 - Food storage, distribution and improved nutrition	6,200	6,940,502		8,273,513	8,300,154	8,328,256	
012002 - Food Security and Emergency Preparedness	35,458,517	337,882,871		389,035,962	411,033,797	434,970,740	
012003 - Increased Growth in Incomes	16,391,587	21,291,487		32,695,492	31,373,457	32,078,183	
012004 - Marketing of Agricultural Produce/Products	45,546	108,500		35,350	12,600	12,600	
012005 - Management of Land and Environment		96,521		10,000			
012006 - Application of Science and Technology in Food and Agric	895,192	29,550,545		51,887,284	52,149,442	52,149,442	
Programmes - Ministry of Food and Agriculture (MOFA)	113,244,212	411,821,430		501,501,707	519,365,270	544,452,954	

BUDGET BY PROGRAMME AND MDA

	2014	2015				2016		2017	FY18	
	Actual	Budget	Actual	Budget Balance	% Total Programme		Budget	% Total	Indicative	Indicative
				V. APRVD	Budget	Actual		Programm		
Programmes - Ministry of Food and Agriculture (MFA)	113,244,212	411,821,430	48,275,304		100.00	100.00	501,501,707	100.00	519,365,270	544,452,954
012001 - Management and Administration	60,453,370	22,891,507	4,042,528		5.56	8.37	27,837,619	5.55	24,795,974	25,241,989
01201 - Finance and Administration	50,430,844	7,113,408	8,977		1.73	0.02	8,568,178	1.71	5,850,124	5,908,267
01202 - Policy Planning Monitoring and Evaluation	616,435	1,446,987	36,370		0.35	0.08	6,702,612	1.34	6,474,377	6,551,099
01203 - Human Resource Development Management	9,253,094	13,481,806	3,985,862		3.27	8.26	11,343,457	2.26	11,521,190	11,786,190
01204 - Statistics Research and Information Department	152,996	677,925			0.16	-	971,783	0.19	950,284	996,433
01233 - ONCHO		50,000	11,319		0.01	0.02		-		
01255 - Ghana Permanent Representative in Rome		121,381			0.03	-	251,589	0.05		
012002 - Food Security and Emergency Response	35,458,517	337,882,871	43,389,128		82.05	89.88	389,035,962	77.57	411,033,797	434,970,740
01201 - Finance and Administration					-	-	9,427,233	1.88	10,087,083	10,087,083
01202 - Policy Planning Monitoring and Evaluation		9,947,720			2.42	-	41,929,781	8.36	45,319,045	45,319,045
01205 - Crop Services Directorate	1,617,981	146,453,510	20,645,091		35.56	42.77	174,105,829	34.72	184,153,430	206,278,744
01206 - Directorate of Agric. Extension	49,900				-	-		-		
01207 - Plant Protection & Regulatory Services	861,643	1,351,889	2,594,201		0.33	5.37	2,075,254	0.41	2,219,703	2,361,546
01209 - Women in Agric. Development Department	6,200	414,232			0.10	-	519,411	0.10	547,312	576,800
01210 - Agric. Engineering Services Dept.	15,279,212	7,367,806			1.79	-	1,064,938	0.21	1,052,835	1,107,205
01211 - Veterinary Services Dept. (Central Administration)	164,459	15,130,716			3.67	-	13,603,336	2.71	14,283,503	14,997,678
01212 - Greater Accra Agric Dev	31,798	1,014,776			0.25	-	1,176,623	0.23	1,204,074	1,264,146
01213 - Volta Regional Agric Dev. Unit	29,090	1,234,958	13,585		0.30	0.03	875,312	0.17	888,409	931,915
01214 - Eastern Regional Agric Dev. Unit	123,001	609,790			0.15	-	625,083	0.12	625,611	656,040
01215 - Central Regional Agric Dev. Unit	74,554	851,758	24,866		0.21	0.05	857,997	0.17	871,307	912,771

BUDGET BY PROGRAMME AND MDA

	2014		2015				2016		2017	FY18	
	Actual	Budget	Actual	Budget Balance V APRVD	% Total Programme		Budget	% Total Program	Indicative	Indicative	
					Budget	Actual					
01216 - Western Regional Agric Dev. Unit	35,000	697,692	12,812			0.17	0.03	866,578	0.17	881,231	922,186
01217 - Ashanti Regional Agric Dev. Unit	48,563	1,604,561				0.39	-	1,466,017	0.29	1,508,673	1,583,166
01218 - B-Ahafo Regional Agric Dev. Unit		932,307	17,086			0.23	0.04	814,967	0.16	825,248	865,375
01219 - Northern Regional Agric Dev. Unit	1,205,990	87,106,088	43,266			21.15	0.09	67,539,069	13.47	74,147,505	74,213,625
01220 - U-East Regional Agric Dev. Unit	30,136	844,269	4,275			0.21	0.01	885,875	0.18	898,668	943,602
01221 - U-West Regional Agric Dev. Unit	65,996	632,253	9,325			0.15	0.02	870,210	0.17	883,075	926,289
01233 - ONCHO	29,989	25,000				0.01	-	37,500	0.01		
01250 - Ghana Irrigation Development Authority	13,004,479	58,112,919	18,461,643			14.11	38.24	66,718,791	13.30	66,887,001	67,116,020
01251 - Irrigation Company of Upper Region	1,318,882	1,877,107	778,962			0.46	1.61	1,762,929	0.35	1,860,495	1,937,732
01252 - Grains and Legumes Dev. Board	1,427,731	1,605,242	784,017			0.39	1.62	1,756,821	0.35	1,830,363	1,907,582
01253 - Veterinary Council	23,913	68,278				0.02	-	56,407	0.01	59,227	62,189
01255 - Ghana Permanent Representative in Rome	29,999					-	-		-		
012003 - Increased Growth in Incomes	16,391,587	21,291,487	703,451			5.17	1.46	32,695,492	6.52	31,373,457	32,078,183
01201 - Finance and Administration						-	-	5,566,408	1.11	5,622,485	5,622,485
01202 - Policy Planning Monitoring and Evaluation		9,553,585				2.32	-	12,003,889	2.39	13,204,278	13,204,278
01205 - Crop Services Directorate						-	-	5,054,032	1.01	5,466,699	5,585,499
01206 - Directorate of Agric. Extension Services.	99,939	90,000				0.02	-	1,043,473	0.21	1,059,118	1,110,090
01208 - Animal Production Directorate	153,768	6,758,175	46,215			1.64	0.10	3,504,061	0.70	3,471,314	3,606,142
01209 - Women in Agric. Development Department (WIAD)		30,000				0.01	-		-		
01211 - Veterinary Services Dept. (Central Administration)	575,750	582,105	149,675			0.14	0.31	5,300,032	1.06	2,359,346	2,750,682
01212 - Greater Accra Agric Dev	11,481,645		507,561			-	1.05		-		

BUDGET BY PROGRAMME AND MDA

	2014		2015				2016		2017	FY18	
	Actual	Budget	Actual	Budget Balance	% Total Programme		Budget	% Total Programme	Indicative	Indicative	
				V. APRVD	Budget	Actual					
01215 - Central Regional Agric Dev. Unit	21,401					-	-		-		
01217 - Ashanti Regional Agric Dev. Unit	12,000					-	-		-		
01218 - B-Ahafo Regional Agric Dev. Unit	35,000					-	-		-		
01219 - Northern Regional Agric Dev. Unit	1,597	4,277,621				1.04	-		-		
01220 - U-East Regional Agric Dev. Unit	9,918					-	-		-		
01232 - NORRIP						-	-	181,846	0.04	190,217	199,007
01250 - Ghana Irrigation Development Authority	4,000,569					-	-		-		
01253 - Vertirinary Council						-	-	41,751	0.01		
012004 - Marketing of Agricultural Produce/Products	45,546	108,500	46,639			0.03	0.10	35,350	0.01	12,600	12,600
01204 - Statistics Research and Information Dept		103,000	46,639			0.03	0.10		-		
01205 - Crop Services Directorate						-	-	22,750	0.00		
01207 - Plant Protection & Regulatory Services (PPRS)	45,546					-	-		-		
01209 - Women in Agric. Development Department (WIAD)		5,500				0.00	-	12,600	0.00	12,600	12,600
012005 - Management of Land and Environment		96,521				0.02	-	10,000	0.00		
01205 - Crop Services Directorate		96,521				0.02	-	10,000	0.00		
012006 - Application of Science and Technology in Food and Agric Development	895,192	29,550,545	93,558			7.18	0.19	51,887,284	10.35	52,149,442	52,149,442
01202 - Policy Planning Monitoring and Evaluation		28,546,351				6.93	-	16,803,413	3.35	17,149,442	17,149,442
01205 - Crop Services Directorate						-	-	35,000,000	6.98	35,000,000	35,000,000
01206 - Directorate of Agric. Extention Services.	834,875	759,194	93,558			0.18	0.19	32,901	0.01		
01207 - Plant Protection & Regulatory Services (PPRS)						-	-	50,970	0.01		
01213 - Volta Regional Agric Dev. Unit	60,317					-	-		-		

BUDGET BY PROGRAMME AND MDA

	2014	2015				2016		2017	FY18	
	Actual	Budget	Actual	Budget Balance V_APRVD	% Total Programme Budget Actual		Budget	% Total Programme	Indicative	Indicative
01219 - Northern Regional Agric Dev. Unit		245,000			0.06		-		-	