AGRICULTURE IN GHANA

FACTS AND FIGURES
(2012)

Issued By:

MINISTRY OF FOOD AND AGRICULTURE

Statistics, Research and Information Directorate (SRID)

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AGRICULTURE IN GHANA: FACTS AND FIGURES

1.0 GEOGRAPHIC AND DEMOGRAPHIC BACKGROUND OF THE COUNTRY

The Country	: Republic of Ghana.
Capital	: Accra.
Population (2010)	: 24,658,823 [1]
Population Estimate (2012)	: 25.91 Million
Population Growth Rate	: 2.5% per annum
Geographic Location	: Latitude 4° 44'N and 11° 11'N; Longitude 3 ° 11' W and 1° 11'E
Coastline	: 550 km long
Principal Agricultural Exports	: Cocoa, Timber, Horticultural Products, Fish/Sea Foods, Game & Wildlife
Principal Mineral Resources	: Petroleum, Gold, Bauxite, Manganese and Diamond.

1.1 AGRICULTURAL GDP (%) BY SUB-SECTORS - 2012

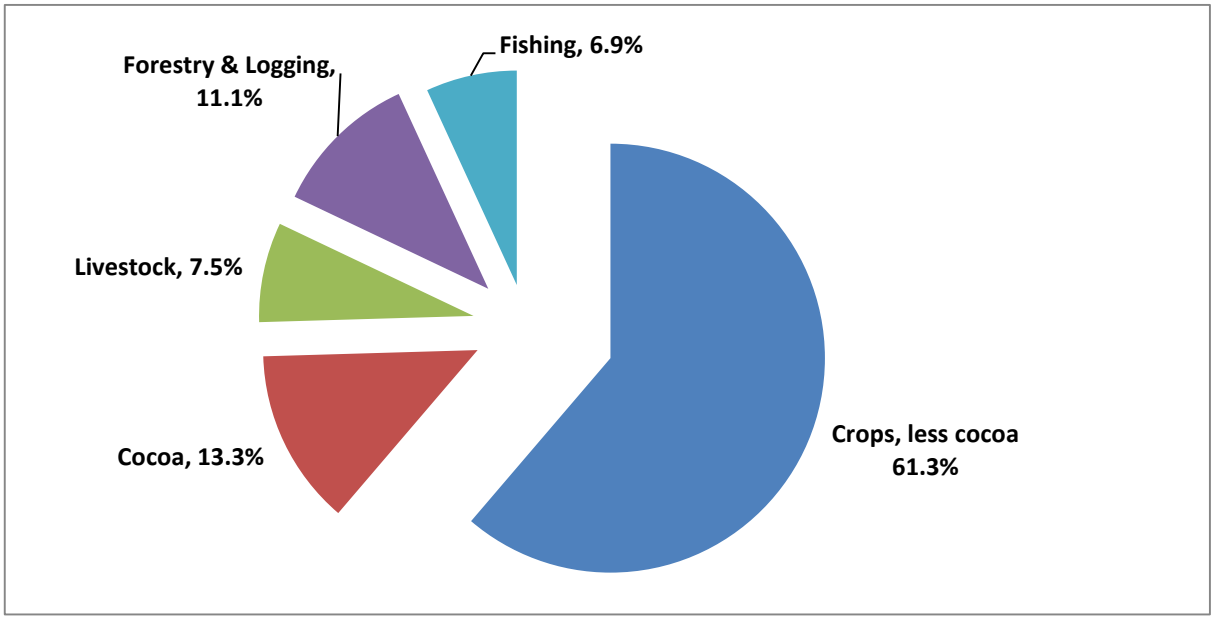


Fig. 1 (Refer to table 8.1)

[1] *2010 National Population and Housing Census (GSS)*

2.0 LAND USE, VEGETATION, SOILS AND CLIMATE

2.1 Land Use (Specific to Agriculture)

Type of Land Use	Hectares	%	Explanation
1.0 Total Land Area (T.L.A.)	23,884,245	100.0	
2.0 Agric. Land Area (A.L.A.)	14,038,224	58.8	(2.0/1.0)
2.1 Area under cultivation (2012)	7,847,300	55.9	(2.1/2.0)
2.2 Total area under irrigation (2012)	30,345*	0.4	(2.2/2.1)
2.3 Area not under cultivation (2012)	6,190,924	44.1	(2.0-2.1/2.0)
3.0 Area under inland waters	1,100,000	4.6	(3.0/1.0)
4.0 Others (forest reserves, savannah woodland, etc.)	9,125,721	38.2	(4.0/1.0)

Sources: The Ghana Survey Dep't and MOFA, Accra
Note: Percentages will not add up to 100, because percentages of areas under cultivation, irrigation and inland waters are of the Agricultural Land Area (ALA).
**provisional*

2.2 Land Use (General)

Land Use	Area ('000 sq. km.)	% of Total
Savanna woodland	63	26
Bush fallow and other uses	45	19
Unimproved pasture	26	11
Forest reserves	16	7
Tree crops	39	16
Annual crops	33	14
Wildlife reserves	12	5
Unreserved forest	5	2
Total	**239**	**100**

Source: Medium Term Agric. Development Program (MTADP) Document (1991). Ministry of Food and Agriculture, Accra.

2.3 **Land Area By Region**

Region	Area (000 sq. km.)	% of Total
Northern	70.38	29.5
Brong Ahafo	39.56	16.6
Ashanti	24.39	10.2
Western	23.92	10.0
Volta	20.57	8.6
Eastern	19.32	8.1
Upper West	18.48	7.7
Central	9.83	4.1
Upper East	8.84	3.7
Greater Accra	3.24	1.5
Total	**238.53**	**100.0**

Source: The Ghana Survey Dept. Accra.

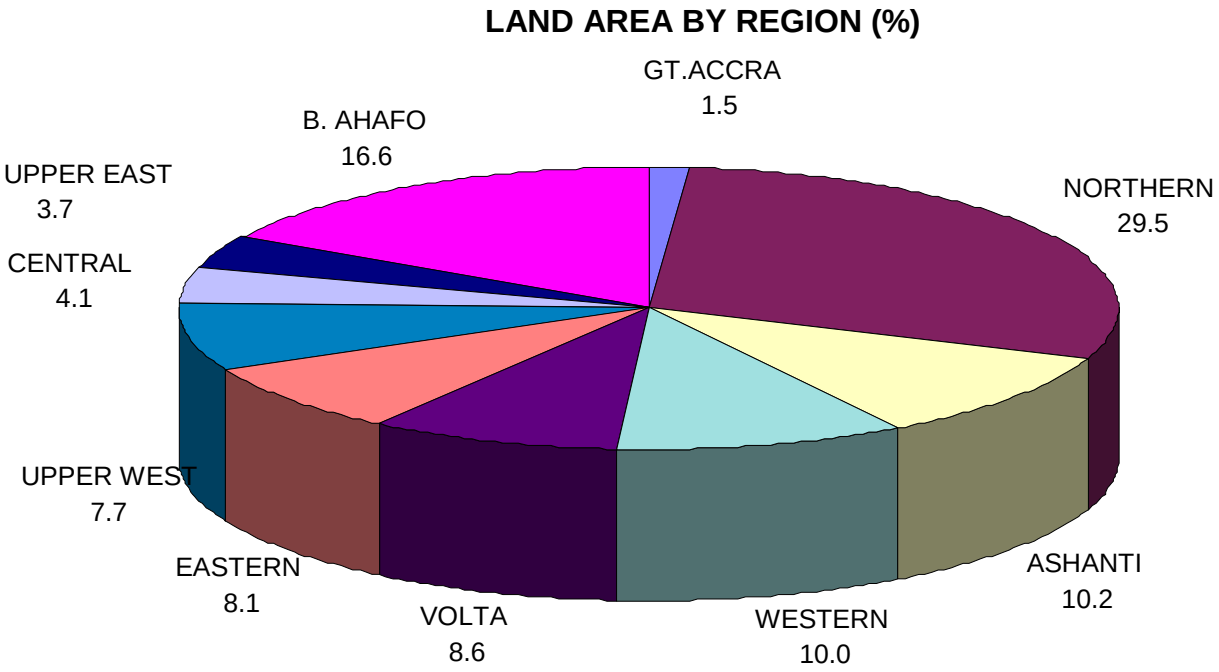


Fig. 2 (Based on Table 2.3)

2.4 Agro-ecological zones:

There are 5 main agro-ecological zones defined on the basis of climate, reflected by the natural vegetation and influenced by the soils. These are Rain Forest, Deciduous Forest, Transitional Zone, Coastal Savanna and Northern Savanna (Guinea and Sudan Savanna).

2.5 Rainfall Distribution by Agro-ecological zones

Agro-ecological Zone	Mean annual Rain (mm)	Growing Period (Days)	
		Major season	Minor season
Rain Forest	2,200	150 – 160	100
Deciduous Forest	1,500	150 - 160	90
Transitional	1,300	200 - 220	60
Coastal	800	100 – 110	50
Northern Savanna:			
Guinea Savanna	1,100	180 - 200	*
Sudan Savanna	1,000	150 - 160	*

Source: Meteorological Services Department, Accra.
**Rainfall distribution is bimodal in the Forest, Transitional and Coastal Zones, giving a major and minor growing season; elsewhere (Guinea Savanna and Sudan Savanna), the unimodal distribution gives a single growing season.*

2.6 Climate:

Tropical eastern coastal belt is warm and comparatively dry, the south west corner is hot and humid and the north is hot and dry. Annual average temperatures range from 26.1^0C in places near the coast to 28.9^0C in the extreme north. Temperatures can move into the 40s though. The highest temperatures are recorded in the Upper East Region, specifically at Navrongo (see page 6 for Regional Rainfall figures).

2.7 Topography:

The topography is predominantly undulating, with slopes less than 1%. Even though the slopes are gentle, about 70% of the country is subject to moderate to severe sheet and gully erosion.

2.8 Vegetation

Vegetation Zone	Area ('000sq. km.)	%
Guinea Savanna Woodland	147.9	62.0
Deciduous Forest		
- Celtis -Triplochiton Association	37.3	15.6
- Antiaris Chlorophora Association	27.0	11.3
Rain/Deciduous Forest Eco-zone	8.4	3.5
Rain Forest	7.5	3.2
Thicket and Grassland	4.5	1.9
Sudan Savanna Woodland	1.9	0.8
Swamp and Lagoonal Vegetation	1.3	0.6
Others	2.7	1.1
Total	**238.5**	**100.0**

Source: Min. of Lands and Forestry, Accra

2.9 Soils:

The soils have predominantly light textured surface horizons in which sandy loams and loams are common. Lower soil horizons have slightly heavier textures varying

from coarse sandy loams to clays. Heavier textured soils occur in many valley bottoms and in parts of the Accra Plains. Many soils contain abundant coarse material either gravel and stone, or concretionary materials which affect their physical properties, particularly their water holding capacity.

2.10 Fertility Status of Soils in Some Regions

Region	Soil pH	% Organic matter	%Total Nitrogen	Available Phosphorus (mg/kg soil)	Available Calcium (mg/kg soil)
Ashanti:					
1. Offinso-Ejura	5.3-7.8	1.5-3.0	0.2-0.3	0.12-12	50-100
2. Kwadaso-Juaso, Obuasi	4.3-7.0	1.5-3.0	0.1-0.2	0.12-12	50-100
Western	3.8-7.1	1.03-5.7	0.06-5.4	0.35-11.25	28-420
Brong Ahafo	3.5-6.7	0.34-1.69	n.a.	0.12-64.25	16-140.3
Greater Accra	5.4-8.2	0.1-1.7	0.05-0.9	0.8-144	14-470
Upper East	5.1-6.8	1.1-2.5	0.06-0.14	1.75-14.75	43.5-151.5
Upper West	6.0-6.8	0.5-1.3	0.01-0.07	2.0-7.4	52-151.5
Northern	4.5-6.7	0.6-2.0	0.02-0.05	2.5-10.0	45-90

Source: Soil Research Institute, CSIR-Kumasi
n.a.: Not Available
Note: See Appendix 11 for soil-crop suitability map.

2.11 Farming Systems

Agriculture is predominantly on a smallholder basis in Ghana. About 90% of farm holdings are less than 2 hectares in size, although there are some large farms and plantations, particularly for rubber, oil palm and coconut and to a lesser extent, rice, maize and pineapples. Main system of farming is traditional. The hoe and cutlass are the main farming tools. There is little mechanized farming, but bullock farming is practiced in some places, especially in the North. Agricultural production varies with the amount and distribution of rainfall. Soil factors are also important. Most food crop farms are intercropped. Mono cropping is mostly associated with larger-scale commercial farms.

2.12 Regional Rainfall Data in mm (2003 – 2012)

REGION	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	10-YEAR AV.	30-YEAR AV.	% Change 2012/30-Year Average	% Change 2012/ 2011
WESTERN	1,467	1,248	1,355	1,350	1,678	1,518	1,385	1,749	1,445	1,298	1,449	1,558	(16.7)	(10.1)
CENTRAL	1,178	949	1,124	1,462	1,330	1,361	1,195	1,359	1,144	1,029	1,213	1,252	(17.8)	(10.0)
GREATER ACCRA	908	484	693	689	863	914	805	871	812	646	768	788	18.1	(20.5)
EASTERN	1,054	1,174	994	1,410	1,328	1,454	1,211	1,477	1,337	1,204	1,264	1,340	(10.2)	(10.0)
VOLTA	1,245	1,215	1,139	1,093	1,195	1,436	1,212	1,009	928	1,061	1,153	1,180	(10.1)	14.3
ASHANTI	1,326	1,098	1,118	1,384	1,542	1,412	1,380	1,397	1,170	1,224	1,305	1,345	(9.0)	4.6
BRONG AHAFO	1,325	1,362	1,244	1,310	1,312	1,366	1,148	1,251	823	1,049	1,219	1,244	(15.7)	27.4
NORTHERN	1,420	1,178	1,123	1,014	999	1,223	1,292	1,361	1,083	1,002	1,169	1,155	(13.2)	(7.4)
UPPER EAST	1,117	613	791	925	1,320	902	884	984	665	956	916	912	4.9	43.7
UPPER WEST	1,189	607	897	982	1,089	1,171	1,086	630	523	1,136	931	1,022	11.2	117.2
TOTAL	**12,229**	**9,928**	**10,478**	**11,619**	**12,656**	**12,757**	**11,598**	**12,008**	**9,929**	**10,605**	**11,389**	**11,796**	**(10.1)**	**6.8**

Source: Ghana Meteorological Agency. Figures in brackets represent negative change.

3.0 RURAL POPULATION*

Rural population constitutes 49.1 percent of total population in Ghana (Table 3.1).

3.1 Distribution of Rural Population by Region (2010)

Region	Estimated Population (Ghana)			Estimated Rural Population		
	Total Population (2010)	% of Total	Inter-censal Growth Rate (%)	Total Rural Population (2010)	% Rural	Population Density (Pers./sq.km)
Ashanti	4,780,380	19.4	2.7	1,883,470	39.4	196.0
Gt. Accra	4,010,054	16.3	3.1	380,955	9.5	1235.8
Eastern	2,633,154	10.7	2.1	1,490,365	56.6	136.3
Western	2,376,021	9.6	2.0	1,368,588	57.6	99.3
Northern	2,479,461	10.1	2.9	1,728,184	69.7	35.2
Brong Ahafo	2,310,983	9.4	2.3	1,282,596	55.5	58
Volta	2,118,252	8.6	2.5	1,404,401	66.3	103
Central	2,201,863	8.9	3.1	1,164,786	52.9	224.1
Upper East	1,046,545	4.2	1.2	826,771	79.0	118.4
Upper West	702,110	2.8	1.9	587,666	83.7	38.0
Total or Av.	**24,658,823**	**100.0**	**2.5**	**12,117,781**	**49.1**	**103**

**Source: Ghana Statistical Services (GSS): Based on 2010 Population and Housing Census*

3.2 Distribution of Agricultural /Rural Households by Region

Region	Total Households (HHs)			Rural Households		
	No.	Agriculture	Percent of Total	No.	Agriculture	Percent of Total
All Regions	**5,467,136**	**2,503,006**	**45.8**	**2,417,800**	**1,840,231**	**76.1%**
Western	553,635	275,975	49.8	304,716	220,634	72.4
Central	526,764	270,854	51.4	271,408	198,703	73.2
Greater Accra	1,036,426	68,715	6.6	86,090	26,981	31.3
Volta	495,603	291,224	58.8	316,789	231,737	73.2
Eastern	632,048	374,257	59.2	338,498	257,652	76.1
Ashanti	1,126,216	412,055	36.6	410,743	275,003	67.0
Brong Ahafo	490,519	336,097	68.5	254,232	214,136	84.2
Northern	318,119	117,631	37.0	212,048	190,901	90.0
Upper East	177,631	148,660	83.7	135,688	127,082	93.7
Upper West	110,175	84,931	77.1	87,546	77,602	88.6

Source: GSS (2010)

3.3: Distribution of Economically Active Population (15years and over) by Region

From the 2010 population census 94.2 percent (10,243,476) of the economically active population (10,876,470) were employed. The proportions of male and female employees were respectively 95 percent and 94 percent.

3.3.1 Economically Active Population (15 years and over) by Region (2010)

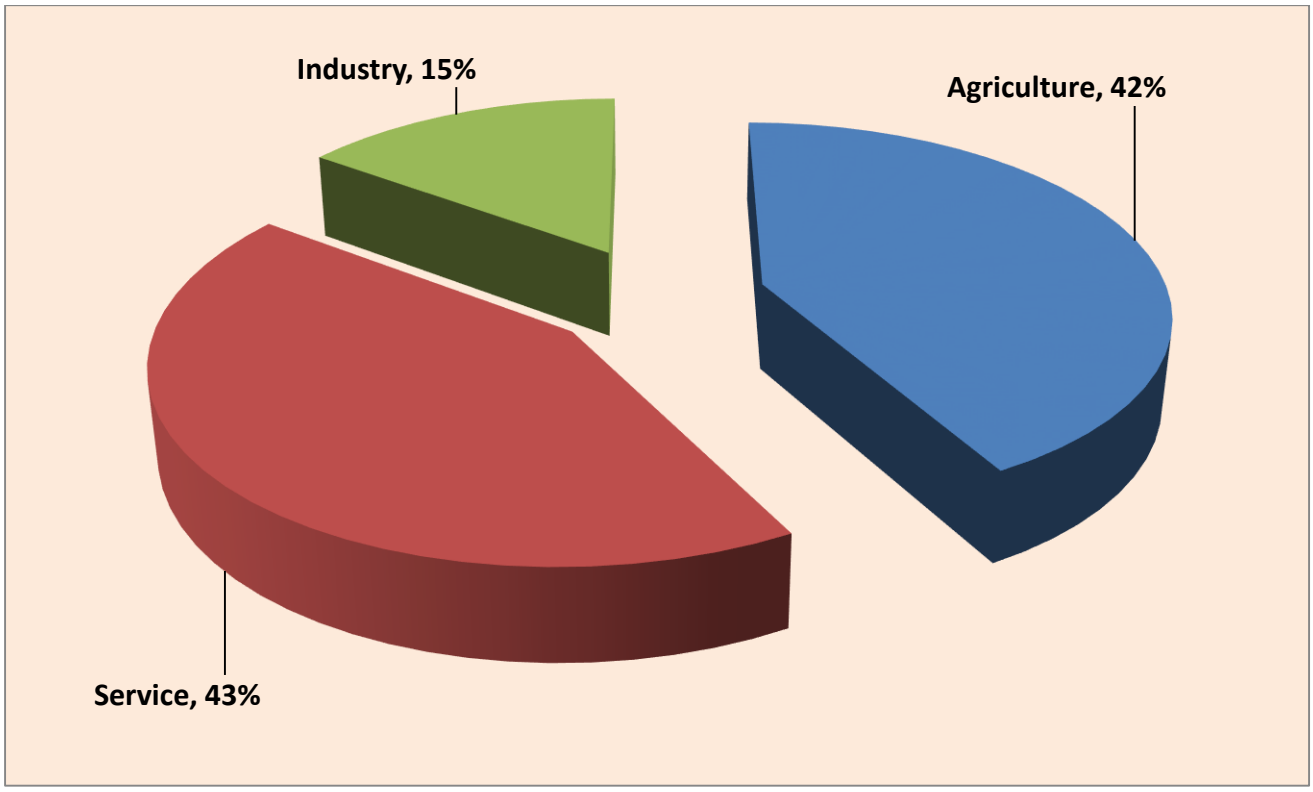
Region	Economically Active (ECA) Pop (Both sexes)	% Tot	Number (ECA) Pop Employed (Both sexes)	% Tot	Distribution of economically active pop by region and sex: Male	% Tot	Female	% Tot	No. (ECA) Pop Employed by Sex: Male	Female
Western	1,021,301	9.4	962,887	9.4	518,839	9.8	503,442	9.0	491,043	470,891
Central	934,289	8.6	880,939	8.6	428,928	8.1	503,442	9.0	405,949	476,129
Greater Accra	1,967,553	18.1	1,802,852	17.6	941,950	17.8	995,150	17.8	891,486	910,878
Volta	912,536	8.4	870,695	8.5	434,217	8.2	481,091	8.6	410,954	460,415
Eastern	1,173,571	10.8	1,116,539	10.9	571,728	10.8	609,606	10.9	541,098	570,412
Ashanti	2,076,318	19.1	1,925,773	18.8	1,000,127	18.9	1,067,788	19.1	946,546	978,971
Brong Ahafo	1,032,177	9.5	983,374	9.6	518,839	9.8	520,205	9.3	491,043	497,081
Northern	1,021,301	9.4	983,374	9.6	518,839	9.8	514,617	9.2	491,043	491,843
Upper East	455,724	4.2	440,469	4.3	217,373	4.1	240,825	4.3	205,727	235,184
Upper West	281,701	2.6	276,574	2.7	138,040	2.6	151,424	2.7	130,644	146,139
Total (All Regions)	**10,876,470**	**100%**	**10,243,476**	**100%**	**5,288,880**	**100%**	**5,587,590**	**100%**	**5,005,534**	**5,237,942**

Source: GSS (2010)

3.4 Share of Total Workforce (Employment) by Sector (Economic Activity)

Figure 3 presents the share (%) of total workforce by economic activity (sector). There are three key sectors of the Ghanaian Economy comprising; Agriculture, Industry and the Services sector. As shown, agriculture's contribution to total employment is estimated to be 42% (2010 population census). Until recently, Agriculture was the largest employer, accounting for over 50 percent (50.6%) of total workforce. The Services sector has now dislodged the agricultural sector as the largest employer in Ghana, with a share of 43%.

Figure 3: Share of total workforce by sector



Source: GSS (2010)

4.0 AGRICULTURAL OUTPUT

4.1 Crop Sub-Sector

4.1.1 Principal Agricultural Produce

- **Industrial Crops**: Cocoa, Oil Palm, Coconut, Coffee, Cotton, Kola, Rubber, Cashew, Shea.
- **Starchy and Cereal Staples**: Cassava, Cocoyam, Yam, Maize, Rice, Millet, Sorghum, Plantain.
- **Fruits and Vegetables:** Pineapple, Citrus, Banana, Pawpaw, Mango, Tomato, Pepper, Okro, Egg Plant, Onion, Asian Vegetables.

4.1.2 Area Planted to Selected Food Crops ('000 ha.)

Crop	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maize	713	940	792	733	740	793	790	846	954	992	1,023	1,042
Millet	193	198	207	182	185	200	163	182	187	177	179	172
Rice	135	123	118	119	120	125	109	133	162	181	197	189
Sorghum	329	337	346	298	305	320	208	276	267	253	243	231
Cassava	726	794	807	784	750	790	801	840	886	875	889	869
Cocoyam	262	282	277	270	255	260	258	252	225	205	204	196
Plantain	265	277	286	281	290	299	305	312	325	328	336	337
Yam	287	300	321	311	300	325	324	348	379	385	204	426
Total	**2,910**	**3,251**	**3,154**	**2,978**	**2,945**	**3,112**	**2,958**	**3,189**	**3,385**	**3,396**	**3,275**	**3,462**

Source: Statistics, Research and Information Directorate (SRID), MoFA.

4.1.3 Area Planted to Other Crops (2012)

Crop	Area ('000 Ha)
Cocoa[1]	1,600.7
Seed Cotton[1]	21.0
Oil Palm[1]	397.0
Tomato[2]	44.8
Other vegetables[2]	62.2
Pineapple[2]	100.0
Sweet Potato	9.6
Others (coconut, banana, kola, rubber, tobacco, etc.)	2,150.0
Total	4,385.3

[1]Cocoa, seed cotton, tobacco and oil palm from Secondary data on Industrial Plantations and Agricultural Services Companies.
[2]SRID projections.

4.1.4 Mean Annual Growth Rates for Area Planted to Selected Food Crops

CROP	Average Area ('000 HA)		Growth Rate (%)	Average Area ('000 HA)		Growth Rate (%)
	2001 – 2003	2004 – 2006		2007-2009	2010-2012	
Roots and Tubers						
Cassava	775.7	774.7	(0.06)	842.3	877.7	2.10
Cocoyam	273.7	261.7	(2.19)	245.0	201.7	(8.84)
Yam	302.7	312.0	1.54	350.3	338.3	(1.71)
Plantain:	276.0	290.0	2.54	314.4	333.7	3.13
***CEREALS**:*						
Maize	815.0	755.3	(3.66)	863.3	1019.0	9.02
Millet	199.3	189.0	(2.59)	177.3	176.0	(0.38)
Sorghum	337.3	307.7	(4.40)	250.3	242.3	(1.60)
Rice (Paddy)	125.3	121.3	(1.60)	134.7	189.0	20.17
Legumes:						
Groundnuts	408.0	454.0	5.64	343.3	351.7	1.21
Beans	160.7	176.7	4.98	154.3	172.7	5.94

Source: Based on Table 4.1.2 and Appendix 14
The average of 2007 to 2009 compared with average of 2010 to 2012 and average of 2001 to2003 compared with average of 2004 to 2006.

4.1.5 Production of Selected Food Crops ('000 Mt)

Crop	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maize	1,400	1,289	1,158	1,171	1,189	1,220	1,470	1,620	1,872	1,683	1,950
Millet	159	176	144	185	165	113	194	246	219	183	180
Rice (paddy)	280	239	242	237	250	185	302	391	492	463	481
Rice (milled)	193	165	167	164	173	128	208	270	3395	319	332
Sorghum	316	338	287	305	315	155	331	351	324	287	280
Cassava	9,731	10,239	9,739	9,567	9,638	10,218	11,351	12,231	13,504	14,240	14,547
Cocoyam	1,860	1,805	1,716	1,686	1,660	1,690	1,688	1,504	1,355	1,299	1,270
Plantain	2,279	2,329	2,381	2,792	2,900	3,234	3,338	3,563	3,538	3,619	3556
Yam	3,900	3,813	3,892	3,923	4,288	4,376	4,895	5,778	5,960	5,855	6,639
Total	**20,093**	**20,371**	**19,704**	**20,008**	**20,555**	**21,302**	**23,750**	**25,919**	**27,559**	**27,907**	**29,192**

Source: SRID, MOFA
Note: Milled rice is estimated to be 69% of paddy (based on industry records).

4.1.6 Indices of Production of Selected Food Crops (average of 1996-97 = 100)

Crop	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maize	129	116	117	119	122	147	162	187	168	195
Millet	105	85	92	98	67	115	146	130	228	107
Rice	116	117	115	121	90	146	190	239	109	233
Sorghum	98	84	87	92	45	97	102	94	84	82
Cassava	145	138	136	137	145	161	173	191	202	206
Cocoyam	117	111	109	108	110	110	98	100	84	82
Plantain	163	166	168	183	187	183	195	194	250	195
Yam	128	131	153	159	178	209	247	237	199	284

Source: Based on Table 4.1.4 and Appendix 13

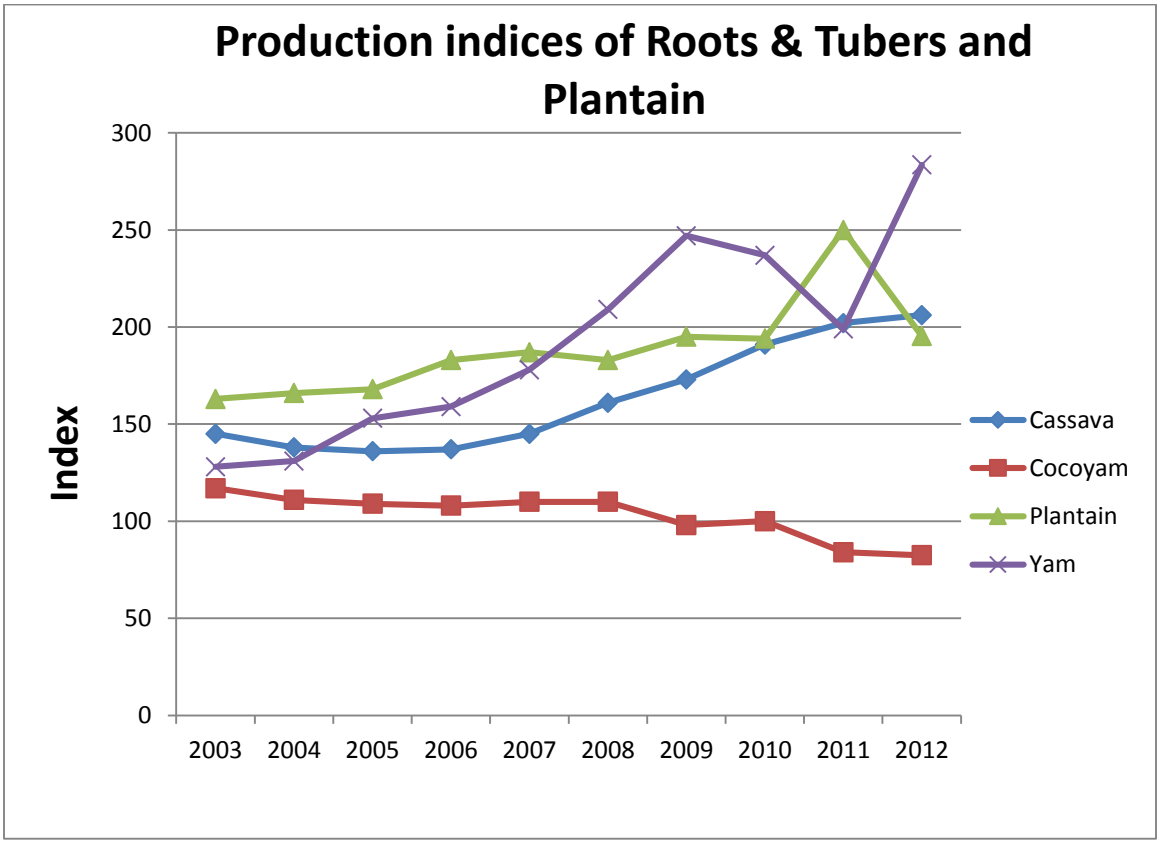


Fig 4a: Based on Table 4.1.5

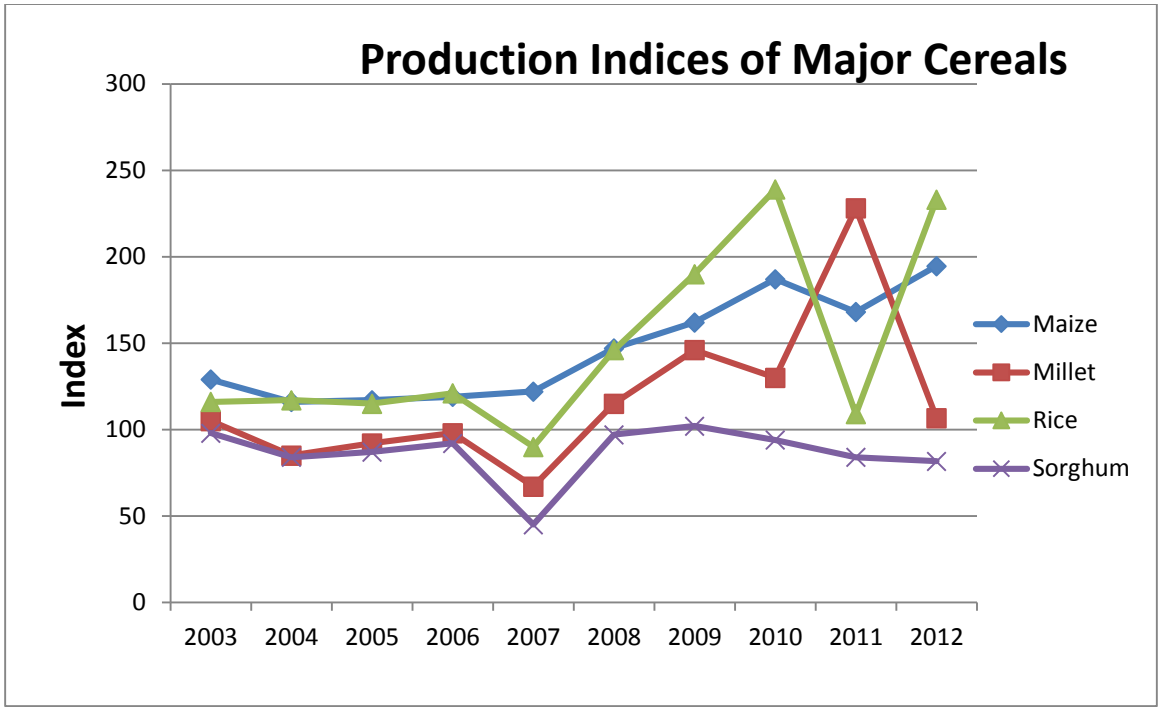


Fig 4b: Based on Table 4.1.5

4.1.7 Mean Annual Production Growth Rates of Selected Crops

CROP	Average Production ('000 MT)		Growth Rate (%)	Average Production ('000 MT)		Growth Rate (%)
	2001 – 2003	2004 – 2006		2007 – 2009	2010 – 2012	
Roots & Tubers:						
Cassava	9,645.3	9,648.0	0.01	11,266.7	14,097.0	12.56
Cocoyam	1,784.3	1,687.3	-2.72	1,627.3	1,308.0	-9.81
Yam	3,753.3	4,034.3	3.74	5,016.3	6,151.3	11.31
Plantain:	2,227.3	2,691.0	10.41	3,378.3	3,571.3	2.86
***CEREALS**:*						
Maize	1,209.0	1,172.7	-1.50	1,436.7	1,835.0	13.86
Millet	156.3	164.7	2.67	184.3	194.0	2.62
Sorghum	311.3	302.3	-1.45	279.0	297.0	3.23
Rice (Paddy)	257.3	243.0	-2.78	292.7	478.7	31.78
Legumes:						
Groundnuts	405.3	443.3	4.69	419.0	490.3	8.51
Beans	118.3	150.7	13.66	168.0	226.3	17.36

Source: Based on table 4.1.5 and Appendix 13
The average of 2007 to 2009 compared with average of 2010 to 2012 and average of 2001 to2003 compared with average of 2004 to 2006.

4.1.8 Average Yield of Selected Food Crops under Rain-fed Conditions

Crop	Average Yield (Mt/Ha)2012	Achievable Yield (Mt/Ha)	% Achievable
Cassava	16.8	48.7	34.5
Plantain	10.5	20.0	52.5
Yam	15.6	49.0	31.8
Cocoyam	6.5	8.0	81.3
Maize	1.9	6.0	31.7
Rice (Paddy)	2.5	6.5	38.5
Cowpea	1.3	2.6	50.0
Soybean	1.9	2.3	82.6
Groundnut	1.4	2.5	56.0
Millet	1.0	2.0	50.0
Sorghum	1.2	2.0	60.0
Sweet Potato	11.5	24.0	47.9
Taro	9.5	12.0	79.2
Cocoa	0.4	1.0	40.0
Coffee	1.5	-	-
Cashew	0.4	1.8	22.2
Orange	35.4	-	-
Pawpaw	46.7	75.0	62.3
Mango	12.5	-	-
Pineapple	60.0	72.0	83.3
Cotton	0.8	-	-
Rubber	0.8	-	-
Tobacco	1.6	-	-
Tomato	7.2	15.0	48.0
Garden eggs	7.7	15.0	51.3
Pepper	8.0	32.3	24.8

Note: *Indicates yields that have been achieved in cases where more effective extension and use of recommended technologies have occurred. The dashes indicate crops for which no on-farm research findings were available as far as potential yields were concerned. Data on achievable yields have been revised in line with new findings by the Crop Research Institute.*

4.1.9 Estimated Levels of Per Capita Consumption of Selected Food Crops

Commodity	Kg/head/year*					
	1985	1990	1995	2000	2005	2010
1. **Roots & Tubers**						
Cassava	146.3	148.0	149.7	151.4	152.9	154.0
Yam	43.8	43.3	42.8	42.3	41.9	50.0
Cocoyam	-	54.0	55.0	56.0	40.0	38.0
2. Plantain	82.5	83.0	83.5	84.0	84.8	85.0
3. **Cereals**						
Maize	39.2	40.3	41.4	42.5	43.8	45.0
Rice (milled)	12.7	13.3	13.9	14.5	15.1	24.0
Millet	9.4	5.1	12.6	9.0	6.4	5.0
Sorghum	14.4	9.3	21.7	14.8	10.1	5.0
Wheat	-	-	-	8.0	8.0	13.0
4. **Fish**	-	23.6	24.2	27.0	30.2	31.0
5. ****Meat**	-	8.0	6.3	6.7	9.4	12.0

**In the absence of a household consumption survey, these estimates have been based on food available for human consumption from both domestic and import sources.*

***For Meat; total meat available for consumption comprising, domestic meat production (incl. meat from the wild [bush meat] averaging 92,000 Mt per annum) plus meat imports have been considered. Dashes indicate cells for which information was not available.*

4.1.10 Provisional Food Balance Sheet (2012/2013)

Type of Commodity	Gross Biological Production (MT)	Available Total Domestic Production Available for Human Consumption* (MT)	Total Imports of Commodi-ties (MT)	Carry Over Stock (MT)	Total Exports of Commodi-ties (MT)	Total Supply of Commodi-ties (MT)	Per Capita Consum-ption (Kg/Annum)	Estimat ed Net Consum -ption of Commo-dities (MT)	Closing Stock (MT)	Total Needs (MT)	Net Deficit/ Surplus (MT)
CEREALS	**2,722,221**	**2,036,849**	**582,875**	**222,100**	**20,200**	**2,821,624**		**2,352,628**	**282,162**	**2,634,790**	**186,834**
Maize	1,949,897	1,364,928	151,258	117,900	20,000	1,614,086	43.8	1,134,858	161,409	1,296,267	**317,819**
Rice (Paddy)	481,010										
Rice (Milled)**	331,897	288,750	508,529	24,200	200	821,279	32	829,030	82,128	911,158	**-89,878**
Millet	179,684	156,325		16,000		172,325	5	129,550	17,233	146,783	**25,543**
Sorghum	279,983	243,585		25,000		268,585	5	129,550	26,859	156,409	**112,177**
Wheat	0	0	320,000	39,000		359,000	13	336,830	35,900	372,730	**-13,730**
STARCHY STAPLES	**26,012,936**	**19,723,987**	**0**	**0**	**10,100**	**19,713,887**		**10,433,957**		**10,433,957**	**9,279,930**
Cassava	14,547,279	10,183,095				10,183,095	152.9	3,961,639	0	3,961,639	**6,221,456**
Yam	6,638,867	5,311,094			10,000	5,301,094	125	3,238,750	0	3,238,750	**2,062,344**
Plantain	3,556,524	3,023,045			100	3,022,945	84.8	2,197,168	0	2,197,168	**825,777**
Cocoyam	1,270,266	1,206,753				1,206,753	40	1,036,400	0	1,036,400	**170,353**
LEGUMES	**850,018**	**746,268**	**0**	**0**	**100**	**746,168**		**492,290**		**492,290**	**253,878**
Groundnuts	475,056	427,550			**50**	427,500	12	310,920	0	310,920	**116,580**
Cowpea	223,253	189,765				189,765	5	129,550	0	129,550	**60,215**
Soya bean	151,709	128,953			50	128,903	2	51,820	0	51,820	**77,083**

Source: SRID, MoFA

*Notes: Estimated Population for 2012, based on 2010 provisional census figure = 25.91 m. **

70% of Domestic production for maize and cassava; 87% for rice, millet and sorghum; 80% for yam

95% for cocoyam; 90% for groundnuts; 85% for plantain and cowpea. Livestock feed, wastage and seed account for the discount

*** Milled rice is 69% of the paddy (as reported by milling industry)*

4.1.11 Production of Industrial Crops (Mt.)

Year	Cocoa[1]	Coffee[1]	Rubber	Sheanut	Oil Palm[2]
1996/97	322,490	2,880	n.a.	21,504	955,505
1997/98	409,360	8,370	n.a.	34,886	1,022,010
1998/99	397,675	3,965	n.a.	17,465	1,031,919
1999/00	436,634	1,956	11,080	30,771	1,066,426
2000/01	389,591	1,379	9,784	19,882	1,586,500
2001/02	340,562	1,464	10,240	27,160	1,612,700
2002/03	496,846	338	10,924	n.a.	1,640,100
2003/04	736,975	477	12,347	n.a.	1,686,800
2004/05	599,318	270	13,619	n.a.	1,712,600
2005/06	740,458	164	13,618	n.a.	1,737,900
2006/07	614,532	304	15,318	n.a.	1,684,500
2007/08	680,800	2,024	14,132	698	1,896,760
2008/09	710,638	516	19,134	31,386	2,103,600
2009/10	800,000	n.a.	n.a.	n.a.	2,004,300
*2010/11	1,024,600	n.a.	n.a.	n.a.	2,125,645
*2011/12	879,348	n.a	n.a	n.a	2,196,098

Sources: 1. COCOBOD,2. Oil Palm Companies (GOPDC, TOPP, BOPP, NOPL) and Individual Plantations. n.a.: Not Available
** Provisional figures*

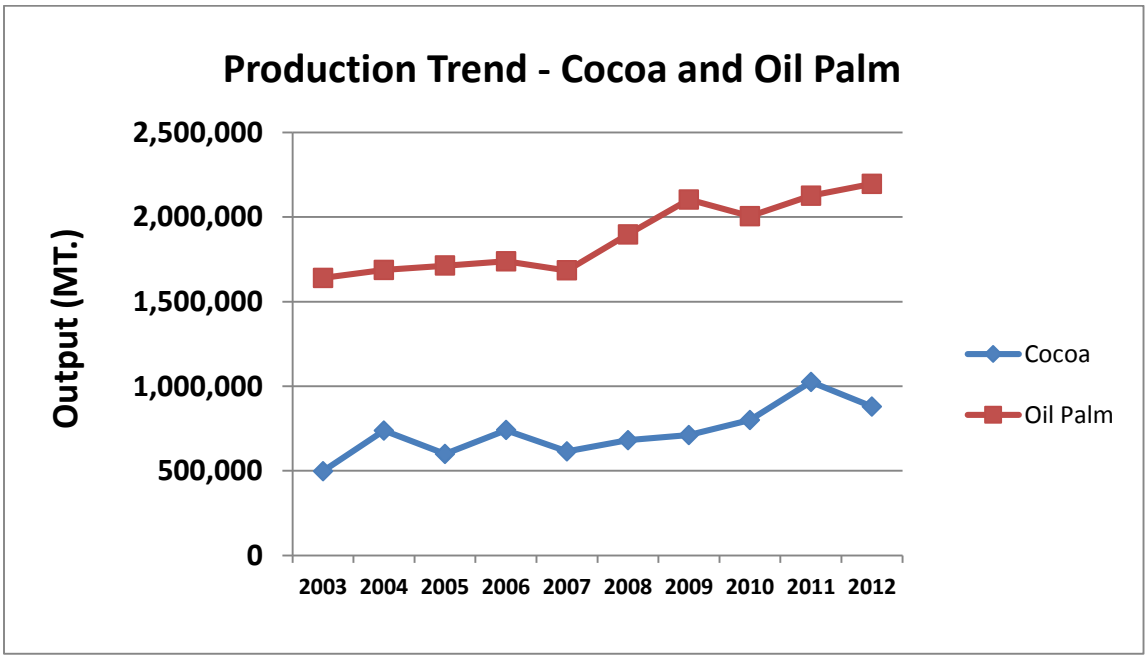


Fig. 5: Based on Table 4.1.11

4.1.12 Projected Cropped Area and Production of Oil Palm

Company	2005 ('000)		2006 ('000)		2007 ('000)		2008 ('000)		*2009 ('000)		*2010 ('000)		*2011 ('000)		*2012 ('000)	
	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production (Mt)	Area (Ha)	Production Tion (Mt)
GOPDC	10.5	126.5	10.9	131.2	7.1	85.4	22.35	268.9	25.0	300.0	27.3	328.3	31.4	376.9	35.4	425.4
BOPP	6.3	86.3	6.3	87.4	6.1	84.4	6.34	87.7	6.0	82.8	6.0	83.7	6.0	83.0	5.9	82.4
TOPP	10.1	108.7	10	107.7	7.4	81.8	12.24	134.1	15.0	163.5	14.6	160.0	15.8	173.6	17.0	187.2
NOPL**	8.1	68.4	8.9	75.3	9.7	82.8	4.00	33.9	6.0	51.0	4.6	39.4	3.7	31.8	2.8	24.2
Medium Farms**	0.66	5.3	0.71	5.8	0.8	6.3	0.74	5.9	0.8	6.3	0.8	6.6	0.9	6.8	0.9	7.0
Other Private Holdings**	263.3	1,317.40	266.1	1,330.50	268.8	1,343.8	288.1	1,440.58	300.0	1,500.0	305.9	1,529.0	315.4	1,576.6	325.0	1,624.1
TOTAL	**298.96**	**1,712.60**	**302.91**	**1,737.90**	**299.9**	**1,684.50**	**337.77**	**1,896.76**	**352.8**	**2,103.6**	**343.3**	**2,004.3**	**373.2**	**2,248.7**	**387.0**	**2,350.3**

Source: Data for GOPDC, BOPP and TOPP was provided by ISSER, Legon.

** GOPDC,BOPP,TOPP were SRID projections*

*** NOPL, Medium Farms and Other Private Holdings were SRID projections including 2009 estimates.*

4.1.13 Actual Crude Palm Oil Production and Projections (Mt.)

Company	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GOPDC	19,956.80	26,530.20	27,065.20	28,743.10	17,842.70	18,055.68	20,143.00	18,960.54	18,045.80	17,131.05
BOPP	17,260.00	14,323.00	16,012.00	16,485.00	15,305.00	14,960.18	14,124.00	14,232.57	13,916.82	13,601.07
TOPP	19,892.10	20,588.20	20,223.60	20,348.00	14,797.10	14,249.66	17,373.00	14,544.40	13,627.94	12,711.48
NOPL	5,274.00	5,801.00	6,381.00	7,019.00	7,721.00	8,492.83	12,775.00	11,812.93	12,856.74	13,900.55
AMEEN	7,367.00	8,104.00	8,914.00	9,805.00	10,785.50	11,863.68	11,000.00	12,589.86	13,314.50	14,039.14
Sub-Total	**69,749.90**	**75,346.40**	**78,595.80**	**82,400.10**	**66,451.30**	**66,668.32**	**75,415.00**	**72,140.30**	**71,761.80**	**71,383.29**
Medium Scale Mills	6,301.00	6,932.00	7,625.00	8,387.00	9,225.70	10,148.07	10,836.00	11,584.66	12,357.44	13,130.22
Small-Scale and Other Private Holdings	188,503.00	207,353.00	228,089.00	250,888.00	275,976.80	303,572.32	316,222.00	342,012.51	364,279.77	386,547.04
TOTAL	**264,553.90**	**289,631.40**	**314,309.80**	**341,675.10**	**351,653.80**	**380,388.71**	**402,473.00**	**425,737.47**	**448,399.01**	**471,060.55**

Source: Data for GOPDC, BOPP and TOPP was provided by ISSER, Legon.
NOPL, AMEEN, Medium Scale Mills and Small-Scale and Other Private Holdings were SRID projections.
**provisional figures*

4.2 Livestock Sub-sector

4.2.1 Livestock Population ('000)

Type of Livestock	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cattle	1,344	1,359	1,373	1,392	1,407	1,422	1,438	1,454	1,498	1,543
Sheep	3,015	3,112	3,211	3,314	3,420	3,529	3,642	3,759	3,887	4,019
Goats	3,560	3,925	3,923	3,997	4,196	4,405	4,625	4,855	5,137	5,435
Pigs	303	297	290	477	491	506	521	536	568	602
Poultry	26,395	28,727	28,386	34,030	37,038	39,816	43,320	47,752	52,575	57,885

Source: SRID/Veterinary Services Directorate, MoFA, Accra

4.2.2 Index of Livestock Population (2000 = 100)

Type of Livestock	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cattle	103	104	105	107	108	109	110	112	113	119
Sheep	110	113	117	121	125	129	133	137	141	147
Goats	116	128	127	130	136	143	150	158	166	177
Pigs	94	92	90	147	152	156	161	165	175	186
Poultry	129	140	139	166	181	194	212	233	257	283

Source: Based on Table 4.2.1.

4.2.3 **Meat Production**

Type of Livestock	Domestic Meat Production (Metric Tons)									
	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Cattle	18,480	18,686	18,879	19,140	19,346	19,553	19,773	19,993	20,592	21,221
Sheep	13,568	14,004	14,450	14,913	15,390	15,881	16,389	16,916	17,491	18,087
Goats	14,098	15,543	15,535	15,828	16,616	17,444	18,315	19,226	20,341	21,198
Pigs	10,181	9,979	9,744	16,027	16,498	17,002	17,506	18,010	19,072	20,224
Poultry	20,588	22,407	22,141	26,543	28,890	31,056	33,790	37,247	41,008	46,308
Total	**76,914**	**80,620**	**80,748**	**92,452**	**96,740**	**100,935**	**105,772**	**111,390**	**118,504**	**127,038**

Source: Estimated from Table 4.2.1 based on information and criteria in Appendix 12

4.2.4 Index of Meat Production (2000 = 100)

Type of Livestock	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cattle	103	104	105	107	108	109	110	112	115	114
Sheep	110	113	117	121	125	129	133	137	142	147
Goats	116	128	127	130	136	143	150	158	167	184
Pigs	94	92	90	147	152	156	161	165	175	201
Poultry	129	140	139	166	181	194	212	233	257	335

Source: Based on Table 4.2.3

4.2.5 Livestock Slaughter Summary (Numbers)

Type of Livestock	2008	2009	2010	2011	2012	Total (5-yr) by Species
Cattle	180,035	178,297	233,491	202,104	220,446	1,014,373
Sheep	60,468	59,985	66,754	73,159	90,656	351,022
Goats	104,266	91,312	104,425	108,826	140,914	549,743
Pigs	13,012	14,191	18,196	20,086	23,608	89,093
Other	2,850	4,357	3,421	3,705	5,521	19,854
Total (All Livestock)	**360,631**	**348,142**	**426,287**	**407,880**	**481,145**	**2,024,085**

Source: Veterinary Services Department, MoFA

4.2.6 Imports of Livestock and Poultry Products in MT

CATEGORY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BOVINE:										
BEEF	1,112.4	2,586.8	6,331.7	10,585.5	16,250.4	13,135.1	12,338.4	11,175.9	14,823.2	16,703.5
BUFFALO	249.6	1,169.2	2,257.1	4,717.3	8,109.0	7,366.8	4,454.5	2,563.9	2,025.0	1,495.0
SUB-TOTAL	**1,362.1**	**3,756.0**	**8,588.8**	**15,302.8**	**24,359.4**	**20,501.9**	**16,792.9**	**13,739.8**	**16,848.2**	**18,198.5**
POULTRY:										
CHICKEN	32,939.0	39,088.6	40,591.0	44,757.7	63,276.3	89,889.0	67,068.6	69,810.8	86,372.5	73,788.4
TURKEY	1,164.5	1,268.7	1,697.2	3,030.3	3,514.7	3,352.8	1,980.2	1,351.7	1,033.0	1,293.7
DUCK	4.1	0.0	0.0	6.1	0.0	16.0	30.8	0.0	4.0	78.3
SUB-TOTAL	**34,107.6**	**40,357.3**	**42,288.2**	**47,794.1**	**66,791.0**	**93,257.8**	**69,079.6**	**71,162.5**	**87,409.5**	**75,160.4**
OTHER:										
CHEVON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MUTTON	2,122.3	2,053.4	3,640.8	4,839.2	6,887.1	5,961.3	6,153.1	4,285.2	4,520.0	2,574.8
PORK	9,882.3	7,756.4	10,286.8	13,290.5	10,551.5	5,487.4	3,150.2	2,716.6	2,507	1,785.8
PROCESSED MEAT	0.0	256.2	270.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUB-TOTAL	**12,353.9**	**10,269.3**	**15,753.1**	**18,129.7**	**17,438.6**	**11,448.7**	**9,303.3**	**7,001.9**	**7,027.0**	**4,360.6**
MILK	349.4	203.3	1,555.1	1,044.2	2,659.9	2,718.9	11,406.4	27,323.0	27,619.0	24,727.5
GRAND TOTAL	**47,823.5**	**54,382.6**	**66,630.1**	**82,270.8**	**111,248.9**	**127,927.3**	**106,582.2**	**119,227.2**	**138,903.7**	**122,447.0**

Source: Veterinary Services Directorate (VSD)

4.3 Fisheries Sub-Sector

4.3. 1 Annual Fish Production by Source (Mt.)

Source	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Marine	331,412	352,405	322,790	315,530	293,398	343,962	318,300	319,331	326,545	333,697
Inland	75,450	79,000	82,654	83,168	84,757	72,590	70,898	83,127	95,353	95,000
Total	**406,862**	**431,405**	**405,444**	**398,698**	**378,155**	**416,552**	**389,198**	**402,458**	**421,898**	**428,697**

Source: Directorate of Fisheries, MOFA.

4.3.2 Annual Aquaculture Production (Mt.)

Year	Production (Mt.)
2005	1,667
2006	1,154
2007	3,257
2008	6,514
2009	7,500
2010	10,200
2011	19,092
2012	27,451

Source: Directorate of Fisheries, MOFA.

4.3.3 Index of Annual Fish Production (1997 = 100)

Source	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Marine	84	89	82	82	74	87	80	81	84	86
Inland	105	110	106	106	118	121	102	133	130	130

Based on Table 4.3.1

4.3.4 Fish Imports and Exports (2008 – 2012)

Category	2008 (MT)	2009 (MT)	2010 (MT)	2011 (MT)	2012 (MT)
Total Fish Imports	191,657	170,744	199,799	191,429	175,341
Total Fish Exports	N.A.	57,621	62,750	44,145	46,234

Source: Fisheries Commission
N.A. = Not Available

5.0 SOME SERVICES TO AGRICULTURE

5.1.1 **Credit Support**

5.1.1 Sectorial Distribution of Credit by Deposit Money Banks (%)

End of Period	Agric Forestry &Fishing	Mining& Quarrying	Manu-facturing	Cons-truction	Electri-city Gas & Water	Commerce & Finance			Trans-port & Commu-nication	Services	Miscel-laneous
						Import Trade	Export Trade	Domestic Trade			
2002	6.5	3.2	15.6	5.5	3.5	4.3	2.2	21.2	4.6	7.1	26.6
2003	0.4	3.2	17.6	5.8	2.5	5.0	2.4	32.4	3.5	15.2	12.5
2004	7.9	2.6	19.4	7.9	2.9	6.9	4.3	19.6	5.4	10.6	12.7
2005	6.4	3.0	20.4	5.7	2.1	7.9	3.0	23.5	4.1	13.6	10.8
2006	6.3	4.4	18.7	6.1	2.5	6.2	2.1	23.9	4.4	17.8	8.2
2008	4.2	2.9	12.3	7.6	4.1	5.2	1.3	25.7	3.2	24.5	9.0
2009	4.5	3.0	9.7	7.0	5.5	4.6	1.5	26.3	3.7	21.7	8.9
2010	5.5	2.8	12.4	7.8	6.8	5.9	1.7	23.1	4.2	21.1	8.6
2011	6.3	3.7	11.2	8.2	6.2	7.6	1.4	18.4	4.1	24.8	8.3
2012	4.7	2.4	12.4	9.2	6.0	8.7	8.0	16.9	5.4	25.2	9.0

Source: Ghana Statistical Service; Quarterly Digest of Statistics (Bank of Ghana)

5.1.2 Bank Lending Rates (Minimum and Maximum) %

End of Period	Agriculture, Forestry & Fishing	Export Sector	Manufacturing Sector
2002	27.00 – 50.00	27.00 – 50.00	27.00 – 50.00
2003	27.50 – 42.25	27.50 – 42.25	27.50 – 42.25
2004	23.50 – 37.50	23.50 – 37.50	23.50 – 37.51
2005	26.00 – 28.75	26.00 – 28.75	26.00 – 28.75
2006	24.25 – 26.00	24.25 – 26.00	24.25 – 26.00
2007	14.83 – 33.50	15.00 – 33.50	15.00 – 33.50
2008	23.75 – 27.25	23.75 – 27.25	24.25 – 27.25
2009	27.09 – 44.61	29.37 – 41.25	27.09 – 39.77
2010	27.63 – 32.75	27.63 – 32.75	27.63 – 32.75
2011	25.93 – 27.63	25.93 – 27.63	25.93 – 27.63
2012	24.65 – 25.72	24.65 – 25.72	24.51 – 25.72

Sources: GSS, Quarterly Digest of Statistics &Bank of Ghana

5.1.3 Basic Information on Banks in Ghana

NO.	Banking License Category	Year Established	Number of Branches as at 2011	Geographical Distribution of Banks
	General Banking License			
1.	Barclays Banks of Ghana Ltd.	1917	92	All Regions
	Class I Banking License(universal)			
1	Ghana Commercial Bank Ltd.	1953	151	All Regions
2	International Commercial Bank Ltd.	1996	13	4 Regions
3	UT Bank (Gh) Ltd.	1995	10	2 Regions
4	SG-SSB Bank*	1973	42	All Regions
5	Stanbic Bank	1999	21	9 Regions
6	Standard Chartered Bank Ghana Ltd.	1894	21	5 Regions
7	The Trust Bank Ltd.	1995	21	3 Regions
8	Unibank Ltd.	2000	14	3 Regions
9	Bank of Africa.	1999	11	4 Regions
10	CAL Merchant Bank Ltd.	1990	17	3 Regions
11	ECOBANK Ghana Ltd.	1990	44	5 Regions
12	First Atlantic Merchant Bank Ltd.	1995	6	2 Regions
13	Merchant Bank (Gh) Ltd.	1972	21	5 Regions
14	HFC Bank	2003	24	7 Regions
15	Agricultural Development Bank Ltd.	1965	75	All Regions
16	National Investment Bank Ltd.	1963	28	All Regions
17	Prudential Bank Ltd.	1994	28	6 Regions
18	ARB Apex Bank	2001	11	All Regions
19	Fidelity Bank	2006	24	4 Regions
20	Guaranty Trust Bank	2005	10	6 Regions
21	Intercontinental Bank	2006	23	5 Regions
22	United Bank of Africa	2004	25	5 Regions
23	Zenith Bank (Ghana) Ltd	2005	19	7 Regions
24	Bank of Baroda	2008	1	1 Region
25	Banque Sahelo-Saharienne Pour L'Investissement et le Commerce (BSIC)	2008	11	4 Region
26.	Energy Bank	2011	19	4 Regions

Source: Bank of Ghana (2012 Annual Report)

**Formerly known as SSB Bank Ltd.*

In addition to the above indicated banks, there are some 116 Rural and Unit Banks operating in the rural and peri-urban setting engaged in deposit mobilization and loan/advances delivery. Again a number of Non-Bank Financial Institutions abound in Ghana. These are helping in various areas in the agricultural sector. For example, of the latter is the Export Finance Company Limited providing the following services:

1. *Pre and Post-Shipment Credit Schemes*
2. *Export Refinance Schemes*
3. *Export Credit Guarantee Scheme*
4. *Export Insurance Schemes and advisory service*

5.2 Agricultural Manpower Development and Research Support

5.2.1 Main Agriculture-Related Research Institutes

Institute	Location	Telephone Numbers	Email/website
Ministry of Food and Agriculture (MOFA)			
Statistics, Research and Information Directorate	Accra	0302-664317/666727	sriddir@gmail.com
Council for Scientific and Industrial Research (CSIR)			
Animal Research	Accra	0302-401846**/** 554744/511746	ari@africaonline.com.gh
Crop Research	Kumasi	03220-60389**/**60391/6**/** 60142	Cridriector@yahoo.com hadapaah@yahoo.comcri @africaonline.com.gh www.cropresearch.org
Food Research	Accra	0302-777330**/** 761209**/** 776897 500111/500470/500331	fri@ghana.com
Oil Palm Research	Kade	027-541475/548545/75 0803-610257/8	csir@ghana.com
Water Resources	Accra	0302-775351**/** 779514-5**/** 775511/777170	wri@ghana.com
Cocoa Research	Accra	0302-777161 (Accra Office)	www.cocobod.com
Forestry Research Institute of Ghana	Kumasi	03220-60122-3 **/** 60370**/**3	director@csir-forig.org.gh
Soil Research	Kumasi	03220-50353-4/ 50060	soil@aol.com.gh
Savannah Agric. Research Institute (SARI)	Tamale	03720-23197/ 23251/ 24411	sari@africaonline.com.gh
Institute of Industrial Research	Accra	0302-500195/500134-7	info@iir.csir.org.gh, industrialresearch@iir.csir. org.gh, joeamoah@yahoo.com
Institute for Scientific and Technical Information	Accra	0302-778808/764822	insti@csir.org.gh, jsam@insti.csir.org.gh
Plant Genetic Resources Centre	Bunso	03420-24124/24138	pgrc@libr.ug.edu.gh
Universities			
University Faculties of Agriculture	Accra, Kumasi Cape Coast Tamale	0302-500180, 03220-60361 03321-32709, 03720-23620	www.ug.edu.gh
Department of Zoology, Uni. Of Ghana (UG)	Accra, Legon.	0302-501404	www.ug.edu.gh
Department of Biochemistry, Nutrition and Food Science (UG)	Accra, Legon	0302-500389	www.ug.edu.gh
Ghana Atomic Energy Commission			
Biotechnology and Nuclear Agricultural Research Institute (BN ARI)	Kwabenya, Accra	0302-400807/400310/401343 402286	director@bnari.org webmaster@bnari.org

5.2.2 Staffing Levels of MOFA by Profession & Category

Category of Staff	2001	2003	2006	2007	2008	2009	2010	2011*	*2012
Professional	633	738	783	793	1,099	1,099	1,362	1,362	1,362
Sub-Professional	529	575	527	530	579	579	530	530	530
Technical	2,947	3,065	2,816	2,831	2,757	2,757	3,385	3,385	3,385
Support Staff [2]	2,508	2,606	2,175	2,293	2,168	2,168	2,376	2,376	2,376
Total	**6,617**	**6,984**	**6,312**	**6,510**	**6,603**	**6,603**	**7,653**	**7,653**	**7,653**

Source: Human Resource Development and Management Directorate (HRDM), MOFA
* Provisional

5.3 Agricultural Mechanization

5.3.1 Agricultural Machinery and Equipment

Year	Importation	
	Make/ Model	Qty. Imported (Units)
2007	Farmtrac-60 tractors	230
	Farmtrac-80 (2x4) tractors	76
	Maize Shellers	220
	Yukon compact tractors	120
	Vari mini systems	250
	Huricaneslashers	50
	Adela slashers	750
2008	Shakti power tillers	200
	John Deere tractors	500
	Mahindra tractors	232
2009	Farmtrac-60 tractors	200
	Kukje Combine harvester	12
	Foton combine harvester (D200)	5
	Foton maize/rice combine harvester	10
2010	China run Yuan Gin Ying Combine Harvester	10
	Thailand Combine Harvester (KT09 Rice Harvester)	2
	Irrigation Pumps and accessories	40
	Rice Mills	12
	Rice Threshers	30

[2] *Support staff includes administrative staff and secretaries.*

	Rice Reapers	30
	Grain Prococoons (50MT)	100
	Grain Prococoons (20MT)	150
	Rice Destoner	2
2011	Foton DC200 rice harvester	70
	Foton GE20H rice/maize harvester	50**
	Cabrio compact tractors	50
2012/2013	Cabrio compact tractors and matching implements	100
Japanese Grant Assistance-2KR programme		
2007	Power tillers	100
2008	Kubota tractors	78
	Water pumps	16
	Rice Mills	20
2010	Tractor and matching implements	125
2011	Combine harvester	2
	Rice threshers	35
	Rice reaper	35
	Rice Mill	10
	Irrigation Pump	40

**30 rice harvester and 20 maize pickers

Source: Agricultural Engineering Services Directorate, MOFA

5.3.2 Total Area under Irrigation (2009 - 2012) HA

	Area (ha) 2009	Area (ha) 2010	Area (ha) 2011	*Area (ha) 2012
Formal Irrigation				
Scheme/Project				
Existing Irrigation Schemes	10,067	10,127	10,668	10,668
Additional Area after Rehabilitation	500	500	481	481
Small Scale Irrigation Development Project	1,279	1,682	0	0
Small Farms Irrigation Project	322	324	110	110
Surface Water Extraction	0	0	0	0
Ground Water Extraction	0	0	0	0
MCA	0	0	450	450
Sub-Total	**12,168**	**12,633**	**11,709**	**11,709**
Informal Irrigation				
Area Under Cultivation	17,636	17,636	17,636	17,636
Grand Total	**29,804**	**30,269**	**29,345**	**29,345**

Source: Ghana Irrigation Development Authority, MOFA

** Provisional figures*

6.0 SOME AGRO-PROCESSING FIRMS

Name	Product	Location	Contacts
Pastry and Confectionery Products			
Aduanepa Vegetarian African Herb Shop	Aduanepa Soya Wheat Powder	P.O. Box 263 Abeka-Accra	0244063811
Akwaaba Chips Masters Ltd., Accra	Akwaaba Cereal corns Snacks	P.O. Box AH 1223, Achimota Accra	0244 945058
Amber Quality Foods Ltd.	Amber Sweet Potato Chips	Box TN 277, Teshie-Nungua	0302-786301
Benito Menni Health Centre	Olemix	Catholic Diocese of Obuasi, P. O. Box 701, Obuasi	03224-20956
Casbea Production Ent.	Cereal Mix Cereal Foods	P.O. Box GP 17446	
Charis Foods,	Ezicook Cocoyam &Fufu Flour	Box UP 868, Knust-Accra.	0276779957
Comas Foods	Comas Banku Mix, Comas TuoZafi, Comas Hausa Koko, Comas Foods Plantain Fufu Flour	P.O. Box AT 1523, Achimota,Accra	0208173123/0302-669341
C4 Food and Beverages Ltd., Accra	C4 Tom Brown	P.O. Box 9036 GBC	0244036075/0244036243
Dakel Industry, Madina	Original Pure Tombrown Wheat & Soya Blend	P. O. Box AH 974, Achimota	020 8336312
Dankosa (Gh) Ltd.	DGL Tropical Delight IstantFufu Flour (Plantain, Cocoyam, Yam)	P. O. Box AN 11908, Accra-North	0302-665995, 020 8116996
Deli Food Co Ltd Ghana	Tango Cheese corn Snacks, Tango Natural Corn Puffs	P.O. Box OS 1447 ,Accra, Ghana	0243444297/0244322218
Dry Food Processing Ltd,	Delicio's 100% Wheat Semolina Pasta	P.O. Box KIA 30443, Accra	0302-910980
Fantasy Foods Limited	Goody's Vegetable Oil, Nana's Vegetable Cooking Oil, Fruity Puffs Cereal Rice Maize Puffs	P. O. Box KIA 30443 Airport-Accra	0302-810514
Flokan Company Ltd., Accra	Flokan Instant Plantain &fufu powder	P.O. Box CT 460, Accra.	0302-810835/ 0302-810837
Fruitful Bough Ltd.	Cereal Rice Cracker, Risorghum Beverage Meal	P. O. Box CS 8548, Tema	0244 790439/ 0244 790369/0277 128153

Name	Product	Location	Contacts
General Mills Co. Ltd., Accra	Maize Grits, Fortified Corn Soya Blend, Fortified Maize Mill	P. O. Box KS 5452, Kumasi	03220-295443
Ghana China Foods Company Ltd.	Ghana China Foods Wheat Flour	P. O. Box CT 1552, Cantonments, Accra	0303-301562
Irani Brothers & Others Ltd., Tema	GMG Selected Hard Spring Wheat Flour	P.O. Box 672, Accra	0302-777124
Jai Ram Manufacturing Company Ltd,	Captain Cook Chapati Flour	P. O. Box CS-8082, Comm-7, Tema, Ghana	0303-310276
Jiji's Enterprise	Jiji's Rice Flour , Jiji's Maize Flour	P.O. Box GP 1785, Accra	0244966636
Keeland Limited	Keeland Porridge	P. O. Box 412 Nkawkaw Ghana	02081127629, 244971629
Lee House & Chemical Ventures	LeemexHousa Koko, LeemexFufu Flour (Plantain, Cocoyam, Pounded Yam)	P.O.Box 16810 Accra North	0244 376747, 0244176206
Magtam Canteen Services,	Kukuaku Hausa Koko, KukuakuKokonte Powder (Lafu)	P.O. Box 8161, (CT), Tema	0303-304932
Mark & B' Face Ltd.	AkrofromGari	P. O. Box 26, Akrofuom-Adansi	P. O. Box 1, AkrofuomAdansi-West
May Just Industries Gh Ltd.	May Just All Family Cereal (Fruity muesli, Fruity crunchy, Pap, Chocoballs, Honey rings, Honey balls, Unimix Cereal Maize	P.O. Box CE 12241 Tema	0303-308711/12, 024 6238825/ 0303-302705/ 0243 217913/ 0208 246234
Neat Foods Company Ltd.	Neat Banku Flour, Neat Housa Koko, Neat Instant Kose Beans Flour, Neat FufuPlantian Flour	P. O. Box 17470, Accra	0302-257906
Neha Manufacturing & Food Processing Ltd.	Vinco Foods Cereals (Basmati Rice, Semolina, Chapati Flour)	B 20/392 DTD, Darku Crescent Area, North Kaneshie Post Office, Accra North	0302-232851, 0244 256537/ 0302-911012
Nestle Ghana Ltd.	Nestle Cerelac (Maize, Wheat, Banana wheat and milk, Honey wheat and milk, Fruits and wheat and milk, Rice and milk)	PMB KIA Accra, Ghana	0302-500701-6

Name	Product	Location	Contacts
New Estuary Ltd., Accra	E Fresh Grammy Golden Flour	Box M 354, Accra	0244644054/0245001354
Nyame Na Waye Bakery	NyamenaWaye Bread Crumbs	P.O. Box AX 142, Takoradi	03120-31526
Pentagon Ventures	Aroza Instant Food Soakings	P.O. Box 2637 Kaneshie- Accra	020 8199685/ 0302-662084
PhilioDelio Smile Foods	YammiGari mix	Box 19205 Accra-North	0302-234703/ 667249, 0208127757,0242167759
Premium Foods Co. Ltd.	Maize Grits (Fortified)	P.O. Box KS 5452, Kumasi	
Priscadel Ventures	Priscadel Ventures Weannimix (Rice, Millet, Wheat)	P.O. Box MC 1481, Takoradi	03120-28517
Sagak Enterprise, Accra	SagakKokonte and Fufu Flour	P. O. Box 9803, Airport-Accra	020 8159921
Selasie Farms & Groceries	SelasieWeenimix, Maize Grits & Special Cereal mix	P.O. Box AN 7541, Accra-North	0302-501529, 024-3217001
Selina Investment Ltd.	Harts Yummies Cereal Corn Snack (Tomato Ketchup Flavour, Cheese Flavour)	PMB CT 392, Cantonments, Accra	0302-270070
Takoradi Flour Mill	Soft Wheat Flour(Special Pastry) -2Kg & 50Kg,Semi Hard Spring Whole Wheat Flour,Hard Spring Wheat Semolina, Selected Hard Spring Wheat Flour (Sunrise), Semolina, Selected Hard Spring Wheat Flour (Sunrise)	P.O. Box 1812,Accra	0302-774226,0302- 774227
TIMS Ltd	TIMS Nutritious Weannimix	P.O. Box 141, Tema, Ghana	0302-815451/ 0243647622/0285 156500
The Celebrated Company Limited	Celebrated Ceremix (millet, maize, rice)	P. O. Box 6246, Kumasi	03220—51931
Trusty Foods, Limited	La Bianca Good Spaghetti	PMB C1, Tema	0303-303612
Tuba Foods Company	Tuba Foods Frozen Plantain & Cocoyam	P.O. Box 680, Mamprobi, Accra	0302-506045/ 502467/ 502774

Name	Product	Location	Contacts
Yedent Agro Processing Ventures Ltd	Corn Soya Blend (CSB), GariforteGari Mix, Maisolet Koko, Cornforte Corn Grit Fortified Maize Meal, Maisoy Forte Porridge	P. O. Box 1423, Accra	0302-785360-3/ 772830/ 773540
Cocoa Products and Preparations			
Afrotropic Cocoa Processing Company Ltd.	Food Saver Cocoa Liquor	PMB Kanda Accra	0303-252147
Allied Cocoa Products Ltd.	Broma Natural Cocoa Powder	P. O. Box OD 203, Odorkor	0302-307632
Asarco Foods And Beverages Limited	Golden Age Natural Cocoa Powder	P. O. Box GP 14765, Accra	0302-225638/ 020 8310985
Becostar Ghana Limited,	Ekubanco Natural Cocoa Powder	P.O. Box AN 5579, Accra North	024 3653412
Body Sense Foods Ltd.	Slim Aid Instant Drinking Chocolate	P. O. Box C919, Cantonments, Accra	0302-764103
Cadbury Ghana Ltd.	Cadbury Richoco	P. O. Box 49, Accra	0302-674335-6
Carepoint Pharmacy	Browncо Cocoa Powder	P.O. Box CT 3214, Cantonments Accra	0244 431379
Chako Enterprise Ltd.	Chako's Drinking Cocoa, Chakos Natural Cocoa Powder	P. O. Box E 129, Takoradi	020 8110192/ 03120-29331
Cocoa Processing Company Ltd.	Golden Tree Vitaco Drinking Chocolate, Golden Tree Choco Delight Chocolate Spread, Cocoa Cake, Cocoa Liquor, Royale Natural Cocoa Powder, Golden Tree All Time Instant Drinking Chocolate	Private Post Bag, Tema	0303-202914/ 202914/ 206375/ 212154/ 212153
Estherford Enterprise	Richesther Natural Cocoa Powder	P. O. Box 8509,Adum-Kumasi	0244664285/ 0244402355
Fan Milk Ltd.	Fanchoco Chocolate Milk	P.O. Box 6460, Accra-North	0302-224421
Gablin Foods Limited.	Gablin Instant Milk Chocolate	P.O. Box 15521, Accra-North	0303-779739, 0244 364040

Name	Product	Location	Contacts
Great Taste Co. Ltd.	Great Taste Cocoa Drink	P. O. Box 16315, Accra	0244773949, 0244832326, 024 6288182
G' Star Enterprise	G' Star Chocolate Drink	P. O. Box 238, Takoradi	0244 737437/ 4455083
Hords Ltd.	Hords Brown Gold Natural Cocoa Powder	P. O. Box DS 790, Dansoman, Accra	0208115058
Ikeg Enterprise	Ikeg Cocoa Powder	P.O. Box DK 315, Darkuman- Accra	027-7745554
Makai Foods & Beverages Ind. Ltd.	Makai Instant Drinking Chocolate	P. O. Box MP 2971, Mamprobi-Accra	024 3338778/ 027 5352688
Nestle Ghana Ltd.	Nestle Chocolim, Sweetened Cocoa Flavoured Mix, Nestle Milo Food Drink	PMB KIA Accra, Ghana	0302-500701-6
Star Foods Enterprise	Star Drinking Cocoa	P. O. Box M.C. 59, Takoradi	03120-23040/ 0208248387
Table Salt Fast Food	Coatonic Natural Cocoa Powder	P. O. Box ML 614, Mallam, Accra	0302-250254/ 0242 175555
Trans-World Freight Services Ltd.	Cell Drinking Chocolate	P. O. Box SR Spintex Road, Tema	0303-305121
Wescans Products Ghana Ltd.	Wescans Natural Cocoa Powder	P. O. Box LT 322 Latebiokorshie	0302-322106
West African Mills Co. Ltd, Takoradi	WAM Natural Cocoa, WAM Deodorised Cocoa Butter, Taski Natural Cocoa Butter, WAM Expeller Cocoa Cake	P.O. Box 257 Takoradi	03120-22511
Fruits and Vegetables			
Aquafresh Ltd.	Fruity Refreshing Drink, Kalyppo Natural Juice, Zogologo Corn Puffs, Milko Chocolate Milk Drink, Frutelli Juice, Jucee Juice	P. O. Box 439, Accra	0302-811811/ 7011333/ 7011222

Name	Product	Location	Contacts
Astek Fruit Processing Ltd	Astek Refresh Plus Natural Pineapple Juice	Mile 51/2 Winneba Road, Malam P.O. Box 4710 Accra-Ghana	0302-302312/3022314
Blue Sky Products Ltd.	Blue Skies Freshly Squeezed Juice	P. O. Box CT 3506, Cantonments	0244 667073
Buelah Investments	Beulah Pineapple Juice	P.O. Box 8366, Accra-North	024 643950 027 7419829
Canee Laboratory Ltd	Canee Pineapple + Melon Juice	P.O. Box Af 368, Adenta-Accra.	
Carlton Company Limited	Fresha Fruit Flavoured Drink	P. O. Box TN 1904, TeshieNungua	0302-712145, 0244-364230, 0244-374887
Demarley Ltd.	Virgin Fruit Juice	P. O. Box CT.5682 Cantonments-Accra	0302-7623306. 0244755553
Difjan Company,	Tropifresh Pineapple Juice	P.O. Box CT 860, Cantonments-Accra	0277 131484
Empirag Foods	Empirag Foods Tiger Nut Yogho	P. O. Box SC 385, Mankwadzi, Tema	0244-722088/ 0208116477
Finer Juice Ltd.	FJ Juice {Pineapple, orange and pawpaw}	P.O. Box GPO 1935, Accra	0302-402762
Freshviews Limited	Vigorite Pure & Natural pineapple Juice	P.O. Box GP 20931, Accra	0302-401136
Frontline Investment Company Limited	S. Cooler sugar Cane Juice	P. O. Box 3176 kumasi	0244231662
Fruito Foods Processing Ltd.	Fruito Pineapple Juice	P. O. Box NT 85, Accra New Town	024 4877446
G & A Enterprise	Angelo Drink (Pineapple, Strawberry, Orange, Pineginger, Pinapass)	P. O. Box CS 8043, Comm. 7, Tema	0303-202559
Gabrho Ltd.,	Pi-nella Cut and chilled Fresh Pineapple	P. O. Box 17811, Accra	0302-234769
Golden Lemon Farms & Processing Enterprise	Juice Fresh Juices (Mixed Fruit, Pineapple & Orange)	P. O. Box ST 91, Stadium - Accra, Ghana	0302-231747
Highland Springs Ghana Ltd.	For You Pineapple Juice	P. O. Box OS 1345, Accra	0302-247167/8

Name	Product	Location	Contacts
Jojem Pharmaceuticals Ltd.	Vita Fruta Exotic Fruit Drink (Orange, Pineapple)	P. O. Box 1944, Kumasi	03220-28509
Kasapreko Co. Ltd.	Kasapreko Lime Cordial	P. O. Box TN 781, Teshie-Nungua Estates, Accra	0302-810956/ 810957/ 810959
KH Jai-SoifEnt	SooboloBisp Fruit Juice	P.O. Box CO 2042 Tema-Comm 7	0246997864
Kies-Maddox Enterprise	Just Juice Pineapple	P. O. Box 565, Nsawam	020 8140828
Kokinko Limited	Papso Fruit Juice (Orange,Guava, Tropical, Mango & Orange)	P.O. Box 11663, Accra – North	0302-221718, 0302-221793
Magvly Industries Ltd	MoblfitedPineAfresh 100% natural Juice	P.O. Box 0413, Osu ,Accra	0277 554219 0244 650939
Milani Food Processing Ltd.	Milani's Pure Passion & Pineapple Juice, Milani's Juice-C Pineapple Drink	P.O. Box KA 18168, Airport Accra	0302-772895, 0244 565680, 020 8487747, 0302- 785599/22
Mission Farms Ltd.	Mission Juice{Mango, Jingo}	P.O. Box 41,Somanya	
Netro Drink Processing	Netro Orange Juice	P.O. Box 11117 Accra-North	020 7586712 0277 672022
Nourisher Processing Ltd	Nourisher Pineapple Juice, Nourisher Combo	P.O. Box AN5095 Accra-North	0302-246747
Papso Ghana Ltd.	Papso Fruit Juices	P.O. Box 2078 Cantonments	0302-221718, 0302-221793
Polano Industrial Company Ltd.	Polano Fresh Mixed Fruits Drink	P. O. Box KS 10070, Kumasi	0244 023081
Processed Foods & Spices Ltd.	Samba Juice (Pineapple, Ginjapine, Multifruity)	P. O. Box B 186, Community 2, Tema	0303-308838/9
Profound Integration	Fruity Juicy Pineapple Juice	C/O P. O. Box 273, Winneba	0244 638630/ 0276299153
Provest Export Ghana Ltd	Sunfruit Pineapple Juice	P. O. BoxCT 4378 Cantonment	0302-517123

Name	Product	Location	Contacts
Ragy Enterprise	Ragy Natural Pineapple Fruit Drink	C/O P. O. Box 129, Korle-Bu, Accra	020-8112212
RFL Farms	RFL Sugar Cane Juice	P. O. Box CO 673, Tema	0208118150
Sailo Food and drinks co.(GH)Ltd.	Master chai Green Tea, Master Chai Milk Tea, Master chai orange +carrot+apple juice	P.O. Box AD91 Adabraka	0302-244417
Sakande Company Ltd.	Sakande Mixed Fruits Drink	P. O. Box 379, Bolgatanga	03820-24476
Sidalco Limited,	Sidalco Pineapple Juice	P.O. Box 11892 C11, Tema	0303-410318, 020 2112424, 024 318704
Springwave Investment Limited	Vita Fruta Juice, Romeo Pineapple Juice	P M B 26, Madina, Accra	0302-513166
Stay Sweet Sugar Industries Ltd.	Stay Sweet Orange Juice	P.O. Box AN 16731, Accra-North	0302-221798/ 020 8138249
Tata Beverages Co. Ltd.	Tropical Ginger Milk	P. O. Box 3891 Kaneshie-Accra	0302-854130/ 0244-638088
The Coca Cola Bottling Company	Minute Maid Active Fruit Nectar{Apple,piniapple and orange}	P.O. Box G 1607 Cantonments-Accra	0302-812626/ 30
Umita Enterprise	Umitida Fresh Sobo Drink	P. O. Box AN 12689, Accra	020 8152400
Oil Processed Products			
Amagio Enterprise, Accra	Amagio Pam Oil	P. O. Box AN 12534	027551574/ 020 7493278
Asomdwehene Industrial Ent. Ltd.	Glaya Virgin Coconut Oil, Kobumcha Tea	P. O. Box 1611, Tema	0303-202503, 0244753716, 0244323183, 0208295967
Centre for Rural Ent. Development	Adepa Palm Oil	P. O. Box 51, Ajumako	0249706071
Henze Poultry Ltd.	Deer Soya Bean Oil	P.O. Box CE 12118 Tema	0244 022377
Nkulenu Industries Limited	Nkulenu's Palm Drink	P. O. Box MD 36, Madina, Accra	0302-500923
Nobel Industries Limited	Diana Pure Vegetable Cooking Oil	P.O. Box 3729, Accra	0302-223329, 0302-235191

Name	Product	Location	Contacts
SNR Foods and Services	SNR Palm Oil (Dzomi Type)	P. O. Box 297, AssinFosu	0244611940
Triune Inspirational Network Ltd	Triune Platinum Gold Health Dandelion Soybean Oil	P. O. Box 450, Akropong-Akwapim	024 9154439
Unilever Ghana Ltd.	Frytol Vegetable Oil, RoycoAbepa Palm Oil	P. O. Box 1648, Accra/ Box 721 Tema	0303-218100
Other Processed Products			
Generation Plus Food Co Ltd.	Victory Soy Milk	P. O. Box WJ 264, New Weija Accra.	0302-851101, 0302-851102
Sunshine Industry Ltd.	Bebeans (Soy milk drink,bean curd, dried bean curd)	P.O. Box 1198, Tema	0303-14588/4505
Wagazi Ventures	Strongman Soya Milk	P.O. Box A309, La, Accra	0302-772281

Source: Ghana Investment Promotion Centre, Accra and Food and Drugs Board

6.1 LIST OF LOCAL HONEY PRODUCERS

NAME OF COMPANY	NAME OF PRODUCT	LOCATION	POSTAL ADDRESS	CONTACT
Britkom Co. Ltd, Accra	Brilvita Honey	Comm. 4 TDC Complex stalls, Tema	P.O. Box CT 4531, Cantonments	0211669230, 0288258878, (0244 669230; Kwame Obiri Yeboah Director) britkom2001@yahoo.com
Margaret Yeboah Ent.	Princess Authentic Honey	Accra.	P.O. Box AN 5417	(0244618000; Margaret Yeboah- Mgr.)
Makies Co. Ltd	Makies Tropical Honey	F 304/4 Nyaniba Estates Osu.	P.O. Box 2327, Accra	(0244 675898; Ayesha Wahab-M.D)
Sarmatex Timber and Plywood Co. Ltd	Sax Pure Rainforest Honey	Western Region	P.O. Box 1 Samreboi	
Joyanco Ltd	Joyanco Natural Tropical Honey	Breman A moanda District Assembly, Ajumako-Central Region.	P.O. Box MS 471,Mile Seven	0208170626, 0277485695 joyancohoney@yahoo.com
FelimscoEnt	Felino Honey		P.O. Box 556, Ho.	
Secats Ventures	Secats Original Pure honey	Roman Ridge flats RR3 F8, Sir ArkoKorsah Rd. near the Roman Ridge shopping Centre/Arcade.	P.O. Box CT 1985, Cantonments	030760377, 0244236001, (020-8180613; Caroline Tsikata-Proprietor)
Medima4 Herbal Centre	Medima4 Pure honey	Hse No. 49, Nii Torgbor Rd. Near Pekan Hotel, IPS Rd. East Legon.	P.O. Box AT 1916, Achimota-Accra	0249992244, 0276225588, medima4herbal@yahoo.com
Big Thank Edible Food Ventures	Jungle Bee Pure Honey	Dunkwa-on Offin – C.R Korlebu Road; Soko adj. Lotto House- Banana Inn Accra.	P.O. Box KN 5293, Kaneshie-Accra	0247-065862, 0302 308870, 0244, 0244-739538

6.2 LIST OF MEAT PROCESSORS

Name	Location	Contact
Spicy Martin	Kaneshie	0242772635
Spicy Food	Swan lake	0244262010
Meat Processing Assistance	Kasoa-Kakraba junction	0249966743/0248100391
M and J	Prampram	0244312224
Mclebest Enterprise	SSNIT Industrial Village GISEL	0207049781
Care Plan	Taifa	0277561057
Tropicana	Sukura	0244682518
Brothers Sausage	Swan lake	0244967692
Sotrec Ghana Limited	Mallam	0302335209/0242964895
Malicat Meat Products	Tema	0303303926/0244215482
Premier Meat Products Limited	Tema	0244977073
T. T. International	Tema	0303300223/0244336475
Foods Inn Limited	Spintex	0244428832
Achimota Packing House	Achimota	0244363401
Bino Foods	Kasoa Old Barrier	0244682518
Cottage Farms Meat Shop	Labone	0244740738/0209421273
Mousack	Osu, next to Sunkwa Clinic	0244372952
Koala Shopping Centre	Osu	0302773455/0244325835
Max Mart Shopping Centre	Near 37 Military Hospital, Accra	0302783750/0244986308
Master Meat/Shoprite	Accra Mall, Near Tetteh Quashie Interchange	0302823087/0245610369
Esmag Foods	Near Kotoku taxi station	0245746411/0244605859

7.0 AGRICULTURAL COMMODITY PRICES

7.1 Nominal Weighted Average Rural Wholesale Price (GH ¢) Per Mt.

CROPS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CASSAVA	54.02	87.39	112.79	107.97	111.31	152.75	189.50	223.57	220.70	336.81
YAM	170.82	204.88	262.67	265.77	292.27	380.00	462.54	507.91	580.10	456.17
PLANTAIN	105.00	231.39	230.92	269.65	302.72	340.10	433.85	554.11	558.65	764.92
COCOYAM	138.61	195.22	220.95	248.92	293.99	349.28	409.14	509.15	587.40	836.90
MAIZE	152.94	214.53	330.47	231.61	266.99	491.27	541.97	487.40	651.19	870.27
SORGHUM	172.56	227.00	387.57	327.00	326.05	519.55	624.64	659.30	780.52	974.67
G/NUT	404.83	469.56	670.69	783.61	769.45	1099.71	1414.72	1528.55	2166.92	3074.69
MILLET	211.70	224.52	403.10	422.35	412.72	638.41	766.33	677.38	765.37	1052.68
RICE	320.30	405.74	501.36	545.95	565.83	873.04	1025.72	1040.83	1177.96	1434.91
TOMATO	325.01	417.39	624.47	575.48	649.44	899.83	1569.95	1713.19	1962.97	2573.74

Source: SRID, MOFA
See Appendices 1-10 for price trend graphs.

7.2 Indices of Nominal Weighted Average Rural Wholesale Price per Mt (2002 Constant Prices)

CROPS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CASSAVA	305	493	637	610	629	862	1,070	59	329	503
YAM	321	385	494	500	550	715	870	161	346	272
PLANTAIN	268	591	590	689	773	869	1,108	218	562	770
COCOYAM	289	407	460	518	612	727	852	179	430	612
MAIZE	233	326	503	352	406	748	825	239	485	649
SORGHUM	277	364	622	525	523	834	1,003	221	419	523
G/NUT	293	340	486	567	557	796	1,024	685	705	1000
MILLET	289	306	550	576	563	871	1,045	229	352	484
RICE	329	416	514	560	580	896	1,052	372	432	526
TOMATO	296	380	569	524	592	820	1,430	694	724	950

Based on Table 7.1

7.3 Real Average Rural Wholesale Price (GH ¢) Per Mt. (2002 Constant Prices)

Crop	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CASSAVA	42.12	57.84	65.73	57.25	53.91	64.24	68.90	76.62	73.41	106.10
YAM	133.19	135.61	153.08	140.92	141.57	159.82	168.17	174.06	192.95	143.70
PLANTAIN	81.87	153.15	134.57	142.98	146.63	143.04	157.73	189.89	185.82	240.96
COCOYAM	108.07	129.21	128.76	131.99	142.40	146.91	148.75	174.49	195.82	263.63
MAIZE	119.25	141.99	192.59	122.81	129.32	206.63	197.04	167.03	216.60	274.15
SORGHUM	134.54	150.25	225.87	173.39	157.93	218.52	227.10	225.94	259.62	307.03
GROUNDNUT	315.64	310.79	390.86	415.50	372.69	462.53	514.35	523.83	720.77	968.56
MILLET	165.06	148.61	234.92	223.95	199.91	268.51	278.61	232.14	254.58	331.61
RICE	249.74	268.55	292.18	289.49	274.07	367.19	372.92	356.69	391.82	452.01
TOMATO	253.41	276.26	363.93	305.14	314.57	378.46	570.79	587.11	652.93	810.75

Source: SRID, MOFA

See Appendices 1-10 for price trend graphs

7.4 Indices of Real Average Rural Wholesale Price per Mt. (2002=100)

Crop	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CASSAVA	63	86	98	85	80	96	102	114	110	158
YAM	79	81	91	84	84	95	100	104	115	86
PLANTAIN	82	154	135	144	148	144	158	191	187	242
COCOYAM	79	95	94	97	104	108	109	128	143	193
MAIZE	89	106	144	92	96	154	147	125	161	204
SORGHUM	72	81	121	93	85	117	122	121	139	165
GROUNDNUT	103	101	127	135	121	150	167	170	234	315
MILLET	76	68	108	103	92	124	128	107	117	153
RICE	91	98	107	106	100	135	137	131	144	166
TOMATO	94	102	134	113	116	140	211	217	241	299

Based on Table 7.3

7.5 National Average Input Prices (GH ¢)

Input	Unit	2007	2008	2009	2010	2011	2012	Change % 2007-08	Change % 2008-09	Change % 2009-10	Change % 2010-11	Change % 2011-12
NPK (15-15-15)	50kg	21.72	36.06	43.40	37.57	34.90	23.97	66.0	20.37	-13.44	-7.12	-31.31
Sulphate of Ammonia	50kg	18.10	28.12	31.69	27.34	28.00	18.72	55.4	12.69	-13.71	2.41	-33.13
Urea	50kg	25.82	37.13	41.42	35.47	33.16	22.56	43.8	11.54	-14.37	-6.26	-31.95
Round Up	1 litre	6.24	8.93	10.48	10.82	9.83	6.56	43.1	17.32	3.28	-9.15	-33.29
Karate	1 litre	7.10	8.28	8.40	8.21	8.36	5.87	16.6	1.40	-2.2	1.80	-29.74
Actellic	1 litre	12.82	11.35	10.83	12.82	12.91	11.61	-11.5	-4.54	18.34	0.67	-10.01
Hoe	Single	2.03	2.51	3.10	3.60	4.04	6.65	23.6	23.59	15.96	12.21	64.62
Cutlass	Single	4.08	4.05	4.60	5.65	6.43	9.39	-0.7	13.48	23.90	13.88	45.52
Jute Sack	Single	0.86	0.99	1.48	1.71	2.13	7.06	15.1	49.59	15.47	24.78	230.86

Source: SRID, MOFA

7.6 Quantity and Cost of fertilizer Subsidy

Year	Total subsidy paid by Government (GH₵ million)	Total Fertilizer subsidized (MT)
2008	20.7	43,176
2009	34.4	72,795
2010	30.2	91,244
2011	78.7	176,278
2012	120.3	176,000
Total	**284.3**	**559,493**

Source: Directorate of Crops Services -MoFA

7.7 Comparison of Fertilizer subsidy Cost to Government with Cost to Farmers and Percentage - 2012

Fertilizer Type	Full Cost (GH₵)/50kg	Subsidy payable by Government (GH₵)/50kg	Price at which Farmers buy Fertilizer (GH₵)/50kg	Percentage (%) of Subsidy
NPK (23-10-05)	76.00	37.00	39.00	49
NPK (15-15-15)	76.00	37.00	39.00	49
Urea	72.00	34.00	38.00	47
Sulphate of Ammonia (SOA)	53.00	18.00	35.00	34

Source: Directorate of Crops Services - MoFA

8.0 AGRICULTURE AND THE NATIONAL ECONOMY

8.1 Contribution of Various Sub-sectors to Agricultural GDP.

Sub-sector	Contribution to Agric. GDP (%)						
	2006	2007	2008	2009	2010	2011	2012
1. Crops (excl. cocoa)	60.1	60.6	64.6	66.6	62.2	61.1	61.3
2. Cocoa	9.9	9.2	8.0	7.7	10.8	14.1	13.3
3. Livestock	8.1	7.9	6.8	6.4	6.8	7.1	7.5
4. Forestry	13.6	14.4	12.1	11.6	12.5	10.9	11.1
5. Fisheries	8.3	7.9	8.6	7.7	7.8	6.7	6.9

Source: Ghana Statistical Service

8.2 Share of Agriculture in GDP (%)

Year	Sector			
	Agriculture	Service	Industry	GDP @ Current Market Prices (GH¢-Million)
2006	30.4	48.8	20.8	18,705
2007	29.1	50.2	20.7	23,154
2008	31.0	48.6	20.4	31,235
2009	31.7	49.5	18.9	38,023
2010	30.2	51.1	18.6	46,042
2011	25.6	48.5	25.9	59,816
2012	22.7	50.0	27.3	73,109

Source: Ghana Statistical Service, Accra (revised GDP, 2012- April 2013)

8.3 Agriculture and Other Sector Real GDP Growth Rates (%)

Year	Sector			
	Agriculture	Services	Industry	National
2006	4.5	6.5	9.5	6.2
2007*	-1.7	7.7	6.1	6.5
2008*	7.4	8.0	15.1	8.4
2009*	7.2	5.6	4.5	4.0
2010*	5.3	9.8	6.9	8.0
2011*	0.8	9.4	41.6	15.0
2012**	1.3	10.2	7.0	7.9

Source: Ghana Statistical Service
** Growth Rates of GDP at 2006 Constant Prices.*

8.4 Growth Rates in Agricultural Sub-Sectors (%)

Year	Sub-sector					National Agric. Real GDP Growth Rate
	Crops**	Livestock	Cocoa	Fisheries	Forestry/ Logging	
2006	3.5	-	2.0	15.0	2.6	4.5
2007	-1.3	4.7	-8.2	-7.2	-4.1	-1.7
2008	8.6	5.1	3.2	17.4	-3.3	7.4
2009	10.2	4.4	5.0	-5.7	0.7	7.2
2010	5.0	4.6	26.6	1.5	10.1	5.3
2011	3.7	5.1	14.0	-8.7	-14.0	0.8
2012	1.0	5.0	-6.9	4.7	-1.4	1.3

Source: Ghana Statistical Service.
***2006 refers to Crops/Livestock*

8.5 MoFA's Share of Total Government Budget.(In Million GH Cedis)

Expenditure Item	2002	2003	2004	2005	2006	2007	2008	2009
Total Central Gov't Expenditure	1544.70	1044.21	1051.32	1269.38	1791.20	5624.59*	8009. 53*	8345.5*
Total Expenditure on Agriculture:	12.70	13.67	14.27	20.98	25.69	33.83	126.68	165.01
Development Expenditure	6.14	2.14	3.82	9.68	11.96	14.42	68.31	89.63
Recurrent Expenditure	6.56	11.53	10.45	11.30	13.73	19.41	58.37	75.38
Total Expenditure on Agriculture (%)	0.82	1.30	1.36	1.65	1.43	1.29	1.58	1.98

Sources: 1. Budget Division, MoFA, Accra2. Ghana Statistical Service, Accra.
** Bank of Ghana,*

8.6 Recent Performance of Non-Traditional Agricultural Exports

Items	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Volume of Non-Traditional Agric. Exports ('000 MT)	-	-	415.8	399.8	316.6	356.5	293.2	299.5	-	-
Value of non-traditional agricultural exports in US $m	138.1	159.8	151.9	203.4	197.3	187.6	150.9	164.9	297.0	276.4
Total Value of all non-traditional Exports US $m.	588.9	705.4	777.6	892.9	1,164.5	1,341.0	1,215.0	1,629.2	2,423.3	2,364.4
Contribution(%) of non-traditional agricultural exports	23.5	22.7	19.5	22.8	16.9	14.7	12.4	12.4	12.3	11.7

Source: Ghana Export Promotion Council, Accra.

8.7 Volume of Main Agricultural Non-Traditional Exports (Mt.)

Commodity	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% Change (2012 -2011)
Horticultural:												
Pineapple	46,391	45,145	71,805	46,694	60,751	40,456	35,134	31,567	40,141	45,057	41,212	-8.5
Yam	13,025	7,973	16,169	18,377	20,297	19,716	20,842	17,571	19,485	27,393	25,079	-8.4
Oranges	15,213	4,307	742	5,846	6,283	3,674	10,991	11,028	10,729	3,812	7,589	99.1
Vegetables	4,961	4,369	607	0	-	6	NA	2,342	3,695	11,658	1,960	-83.2
Banana	3,233	364	725	1,117	44,098	52,069	69,779	47,613	64,202	63,761	60,425	-5.2
Mangoes	126	234	376	407	182	824	858	435	291	869	1,222	40.6
Pawpaw	1,474	1,917	3,752	3,212	1,912	1,194	968	891	812	920	426	-53.7
Fish & Seafoods:												
Tuna Fish	17,810	13,431	26,600	19,448	45,476	45,119	26,816	19,325	20,632	4,707	19,799	320.6
Other Fish	1,779	5,321	18,589	69,936	28,052	18,169	12,394	10,695	4,855	7,972	-	
Lobsters/Shrimps, etc.	377	705	1,143	203	401	493	258	18	75	57	18	-68.4
Cuttle Fish/Octopus	449	795	4,485	594	1,284	896	557	149	388	560	412	26.4
Processed & Industrial:												
Cashew Nuts	3,892	6,338	51,764	14,487	34,962	23,616	81,190	52,965	57,095	215,587	157,176	-27.1
Cocoa Products	67,615	63,933	58,297	43,121	80,426	-	107,860	-	-	233,730	-	-100.0
Lint Cotton	3,640	40,302	3,551	3,862	5,793	3,772	3,662	-	729	1194	-	-100.0
Coffee	1,326	769	682	585	214	1,464	2,023	1,346	1,737	9,035	48,517	437.0
Cotton Seed	6,297	9,145	9,933	7,355	5,354	5,337	3,711	1,201	419	3,530	7,077	100.5
Kola nut	11,559	9,032	2,353	816	945	6,753	4,966	5,182	7,878	1,186	1,758	48.2
Shea nuts	27,627	66,997	5,548	165,508	104,747	57,166	55,488	67,826	41,219	111,194	108,976	-2.0

Source: Ghana Export Promotion Council (GEPC), Accra.

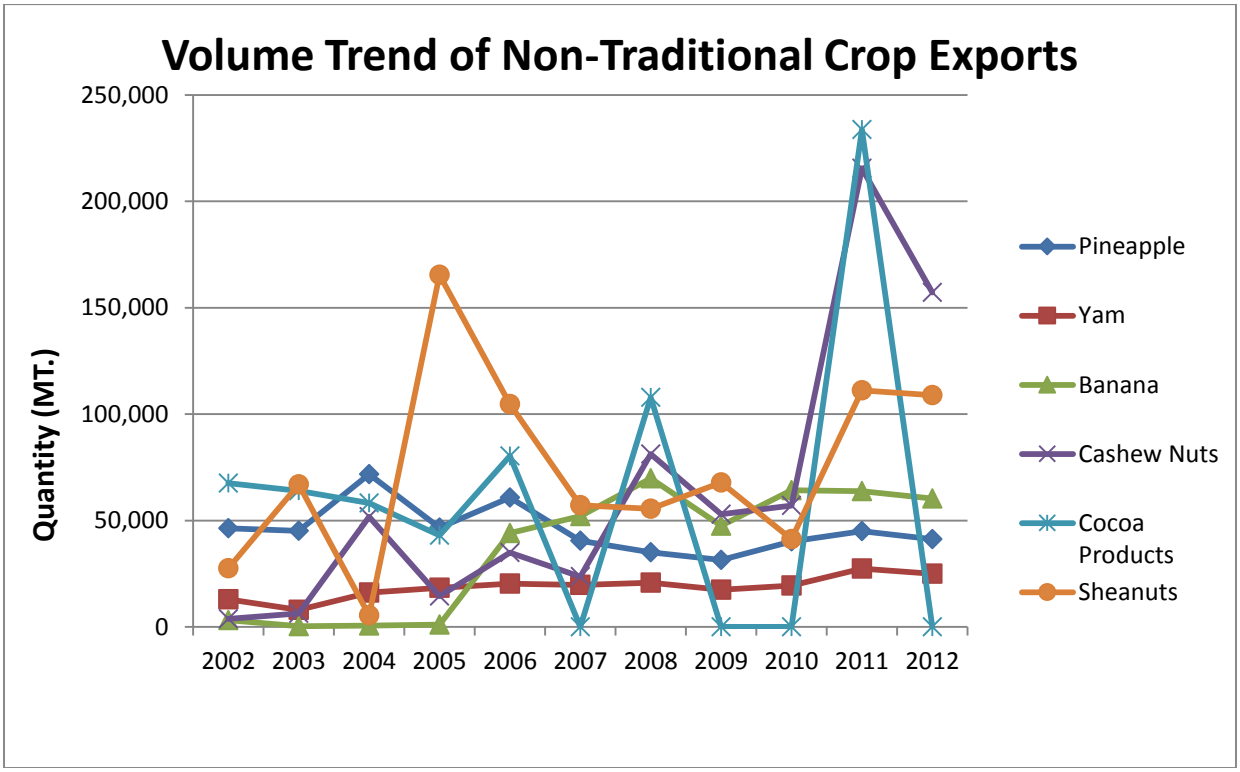


Fig 6: Based on Table 8.7

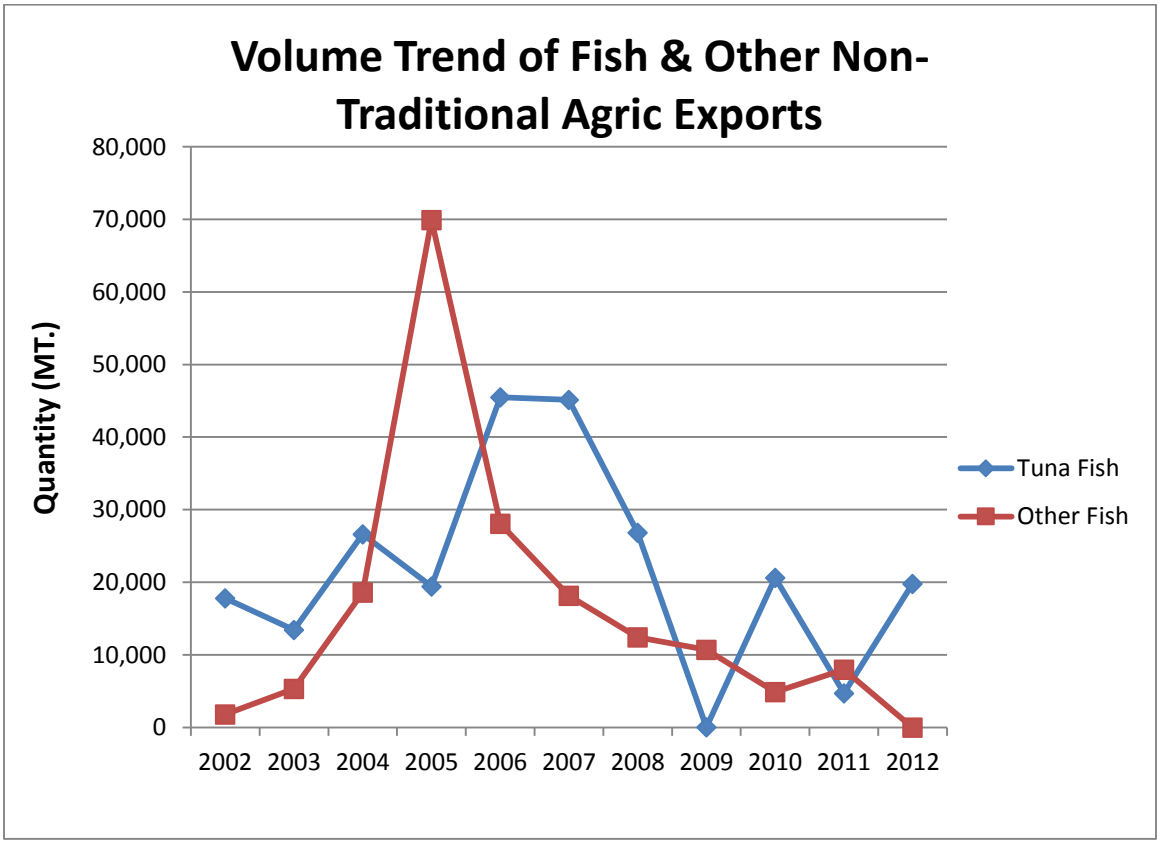


Fig 7: Based on Table 8.7

8.8 Value of Main Agricultural Non-Traditional Exports: (US $'000)

Commodity	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% Change (2012/2011)
Horticultural:												
Pineapple	15,520	14,378	22,069	13,430	19,086	13,475	11,842	10,628	13,555	16,973	16,816	-1.0
Cotton Seed	363	220	1,965	1,762	3,187	3,010	1,624	1,106	172	259	970	274.5
Kola nut	1,122	948	1893	125	944	1,296	975	1,463	1,990	259	393	52
Yam	2,428	4,442	8,400	10,951	14,157	14,551	14,889	12,032	12,688	12,730	12,251	-3.8
Orange (Fresh)	672	329	94	3,865	462	333	1,647	875	654	226	483	113.7
Vegetables	3,333	2,771	423	66	79	49	-	1,362	2,067	3,878	1,215	-68.7
Banana	3,250	227	209	489	10,330	9,965	12,717	11,590	15,533	15,357	15,317	-0.3
Mangoes	70	108	164	135	83	998	522	235	230	2,786	2,689	-3.5
Pawpaw	864	737	1,267	1,081	937	1,020	334	546	971	448	136	-69.6
Fish &Seafoods:												
Tuna Fish	12,191	8,901	23,620	14,978	32,148	52,753	40,666	27,667	37,421	10,269	44,999	338.2
Fish (NES)	6,205	10,659	21,108	26,386	29,693	27,965	17,350	19,934	9,062	17,088	13,940	-18.4
Lobsters/Shrimps, etc	1,051	2,612	1,013	843	1,780	2,174	983	49,600	341	289	92	-68.2
Processed Tuna	71,048	64,051	-	54,850	55,520	-	-	-	-	220,697	-	-100.0
Cuttle Fish/Octopus	636	1,378	2,898	2,918	4,124	3,514	1,759	223	836	4,487	1,455	-67.6
Processed & Industrial:												
Cashew Nuts	1,450	2,599	18,759	5,498	11,975	10,779	20,424	20,154	24,435	149,715	91,290	-39.0
Cocoa Products	88,769	138,622	83,579	74,029	152,945	-	-	-	-	876,278	-	-100.0
Raw/Lint Cotton	6,143	46,051	3,773	4,053	4,427	2,102	2,560	-	228	253	508	100.8
Robusta Coffee	643	365	481	256	133	1,808	-	1,700	1,974	8,980	-	-100.0
Sheanuts	6,125	16,746	2,463	28,969	27,249	27,009	24,940	26,853	13,791	25,087	26,338	5.0

Source: Ghana Export Promotion Council (GEPC), Accra.

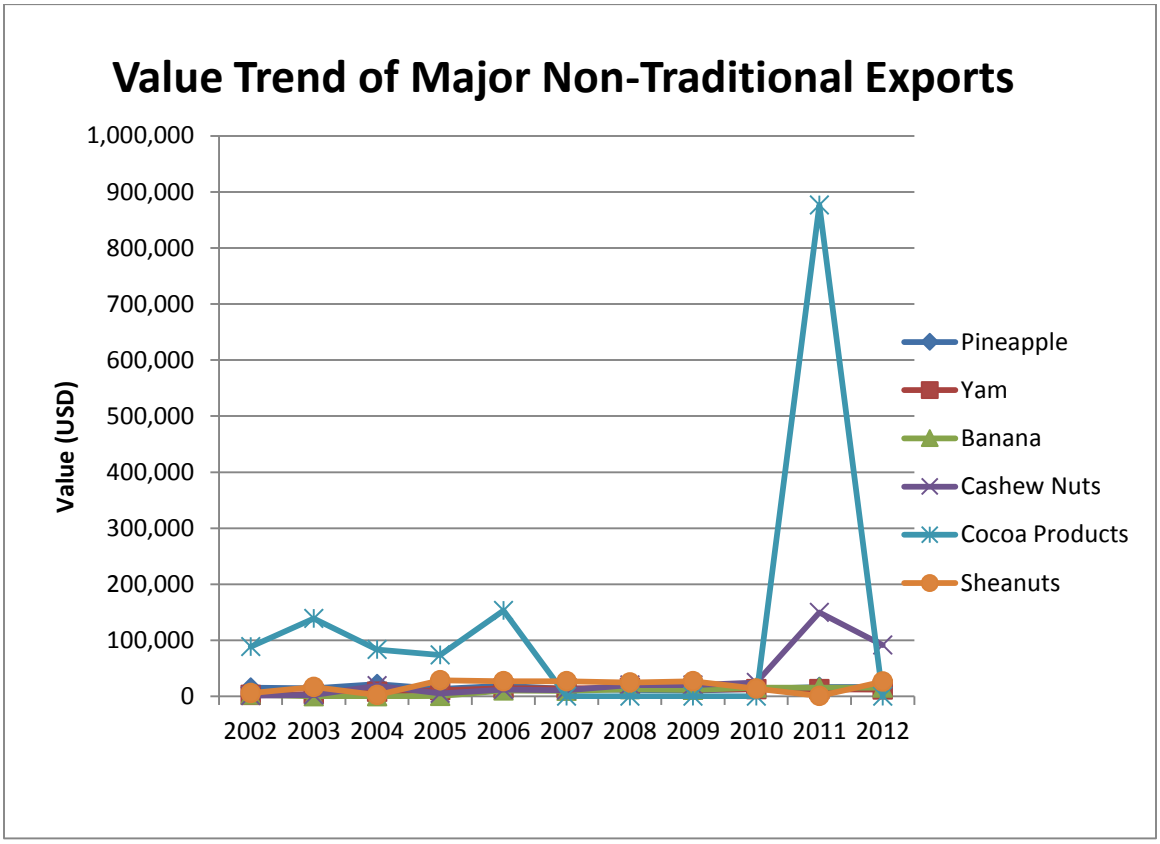


Fig 8: Based on Table 8.8

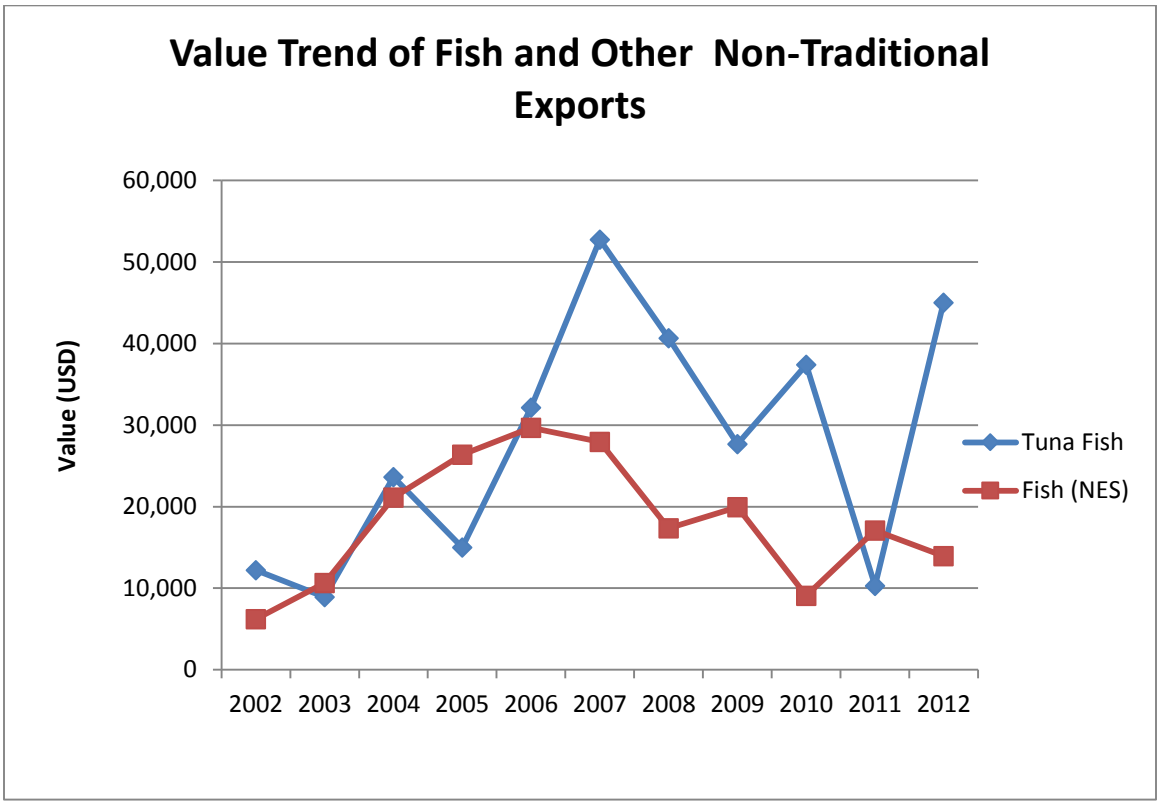


Fig 9: Based on Table 8.8

8.9 Quantity and Value of Cereal Imports (2002 – 2012)

Year	Wheat	Rice	Maize	Sorghum
2002 Quantity (Mt)	182,681	296,953	10,470	5,135
Value $ million	78.59	68.85	2.08	2.25
2003 Quantity (Mt)	147,779	797,705*	163	193
Value $ million	50.7	124.66	0.07	0.002
2004[a] Quantity (Mt)	247,991	253,905	140	2.6
Value $ million	84.32	119.15	0.086	0.77
2005[a] Quantity (Mt)	369,733	484,513	54,965	-
Value $ million	99.69	138.94	12.31	-
2006[a] Quantity (Mt)	254,052	389,660	6,572	0.58
Value $ million	46.37	159.47	1.43	-
2007[a] Quantity (Mt)	332,299	442,073	596	-
Value $ million	111.38	157.86	0.21	-
2008 Quantity (Mt)	337,178	395,400	63,869	n.e.
Values $ million	175.35	187.28	18.69	n.e.
2009 Quantity (Mt)	329,970	383,985	34,333	0.2
Values $ million	121.8	218.5	8.1	n.e.
2010 Quantity (Mt)	315,838	320,152	955	5.0
Values $ million	117.18	200.88	0.66	n.e.
2011 Quantity (Mt)	325,030	543,465	4,515	31
Values $ million	150.46	391.17	4.38	0.01
2012 Quantity (Mt)	190,711	508,587	113,343	0.6
Values ¢ million	149.55	639.40	6.79	0.1

Source: Ministry of Trade & Industry, Accra. [a]Figures from GSS.
** Part of this amount may have been trans-shipment to neighbouring countries. However, this could not be ascertained from the MOTI, PSI.n.e:Value is negligible*

8.10 Food Aid Imports (Mt)

Year	Wheat	Rice	Soya bean	Sorghum	Maize [a]	Vegetable Oil
2002	44,570	2,010	1,580	9,920	n.a.	n.a.
2003[a]	47,360	667	670	3,500	698	n.a.
2004[a]	25,578	6,751	n.a.	3,497	638	n.a.
2005	20,566	600	n.a.	8,059	1,702	n.a.
2006	42,378	425	n.a.	8,541	2,165	n.a.
2008	n.a.	269	n.a.	n.a.	2,064	n.a.
2009	n.a.	900	2,466	n.a.	1,133	620
2010**	n.a.	1,319	n.a.	n.a.	946	1,377

Source: World Food Program
[a] Maize quantity for 2010 (884Mt) is largely Maize mixed with beans and vitamins.
n.a.: None of these commodities came into the country as Food Aid for that year.
*** 2010 figures are provisional*

8.11 Fertilizer Imports, 2002 -2012 (Mt)

Year	NPK	Urea	M. of Potash	SOA	SSP &TSP*	Nitrate*	Pot. Sulphate	Cocoa Fert.	Others	Total
2002	800	n.a.	18,484	20,047	1,656	n.a.	n.a.	n.a.	901	41,888
2003	18,890	500	23,440	25,715	n.a.	7.35	n.a.	19,500	4,027	92,807
2004	18,223	250	822	7,688	1,850	95,312	72,000	25,000	2,588	223,733
2005	38,978	4,540	1,000	15,000	1,000	157	135	12,000	18,496	91,306
2006[a]	84,907	9,072	19	19,090	99	52,601	103	n.a.	23,988	189,879
2007[a]	87,388	4,962	109	17,458	504	52,823	321	n.a.	26,029	189,594
2008	18,873	13,773	8,853	4,172	15,440	64,085	371	n.a.	61,463	187,030
2009	197,631	25,028	15,007	4,616	66,501	110	n.a.	n.a.	26,293	335,186
2010	30,560	11,521	16,079	12,077	52,117	236,547	n.a.	n.a.	130,314	489,215
2011	139,128	12,363	10,387	46,222	72,976	75,292	1,004	24,192	50,779	432,343
2012	2,923,304**	31,950	43,384	83,840	78,355	267	n.a.	n.a	201,432	3,362,532**

*Source: 1. Ministry of Food and Agriculture, Crops Services Directorate, Accra 2. GSS, Accra (2004-2007) 3. Plant Protection and Regulatory Services Directorate (2012).*SSP & TSP are Single and Triple Super Phosphate respectively. Nitrate fertilizers include Potassium and Calcium Nitrate. [a]NPK includes 15-15-15 and other NPKs put together.*

***The large **NPK** import figure for 2012 (2,923,304Mt) represents total imports for both liquid (2,692,580.36Mt) and Solid (230,723.24) fertilizers (NPK). Total overall imports (all types) for solid fertilizers (excl. liquid) for 2012 thus compute to **669,950.8Mt** and not **3,362,532 Mt** (which represents total for both liquid and solid fertilizer imports).*
***Please note that liquid fertilizer imports were introduced in 2012(earlier import volumes (2002-2011) thus represent, solely, solid fertilizers)**.*

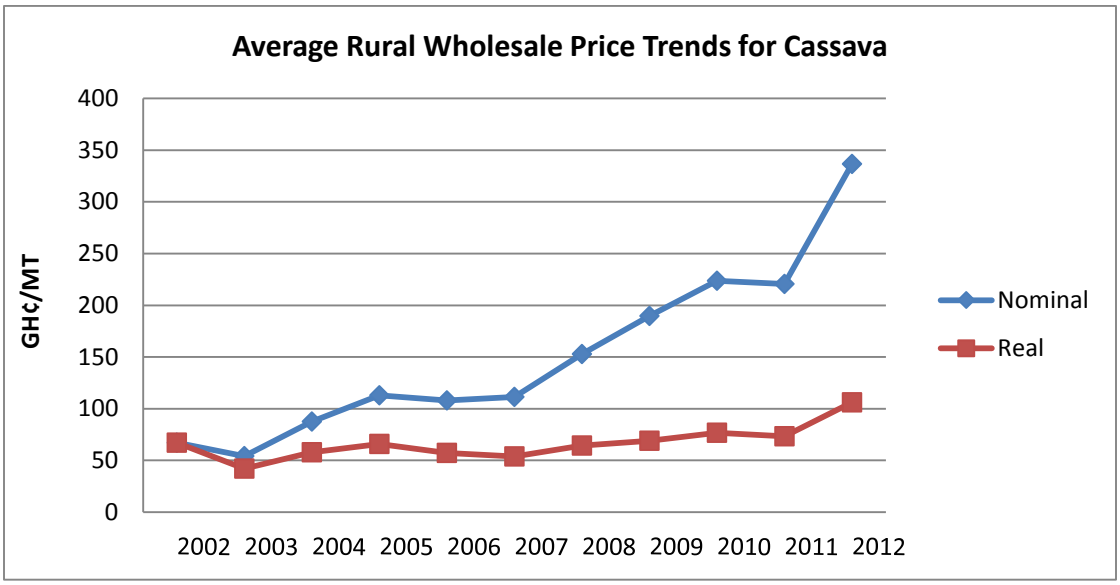
n.a.= Figures not available.

8.12 Agro-chemical Imports (Mt)

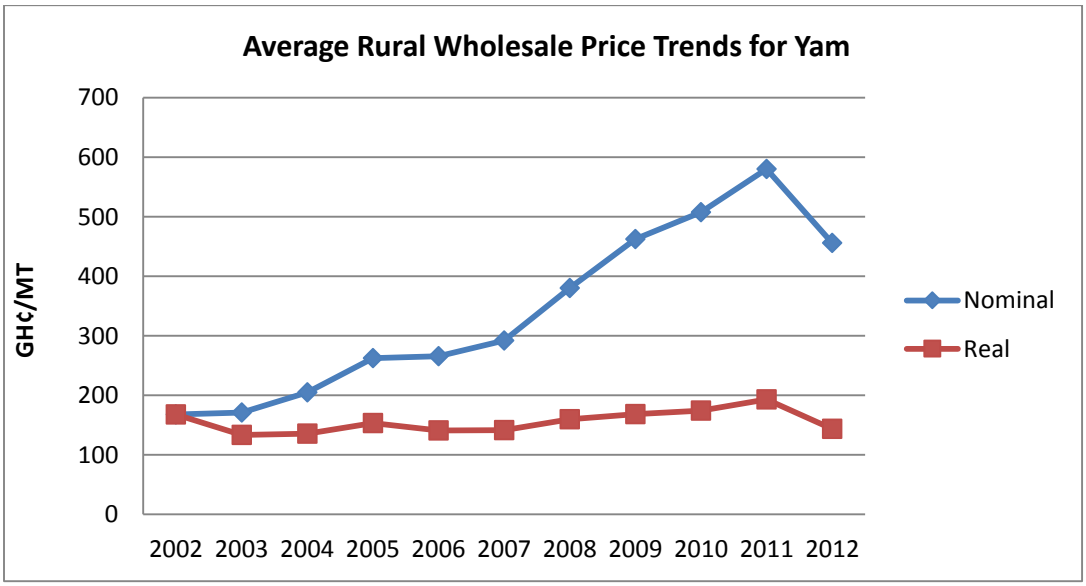
Types of Agro-chemical	Year								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
Insecticide	1,090	5,829	610	5,982	6,921	9,979	5,121	5,078	8,735*
Fungicide	1,345	1,673	770	1,713	2,148	2,575	2,767	1,248	4,955
Herbicide	582	2,472	1,096	5,340	8,780	8,932	10,835	4,525	n.a.
Rodenticide	563	159	n.a.	13	78	123	n.a.	1,187	n.a.
Total	**3,580**	**10,133**	**2,476**	**13,048**	**17,927**	**21,609**	**18,723**	**12,038**	**13,690**

Source: GSS, Accra
n.a. Figures not available.
** Value also includes that for Rodenticides.*

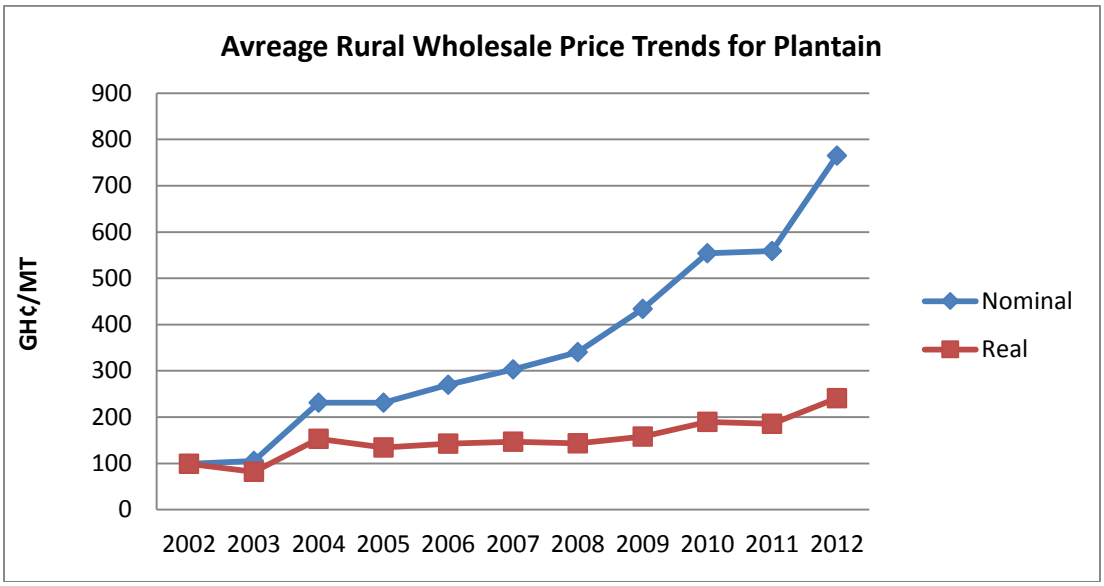
APPENDIX 1



APPENDIX 2



APPENDIX 3



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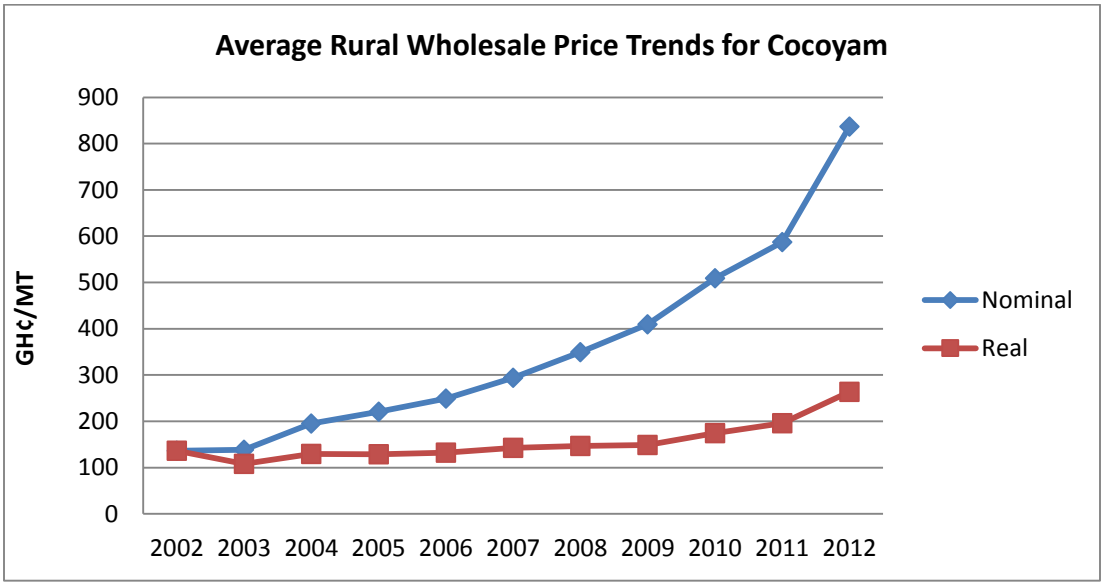

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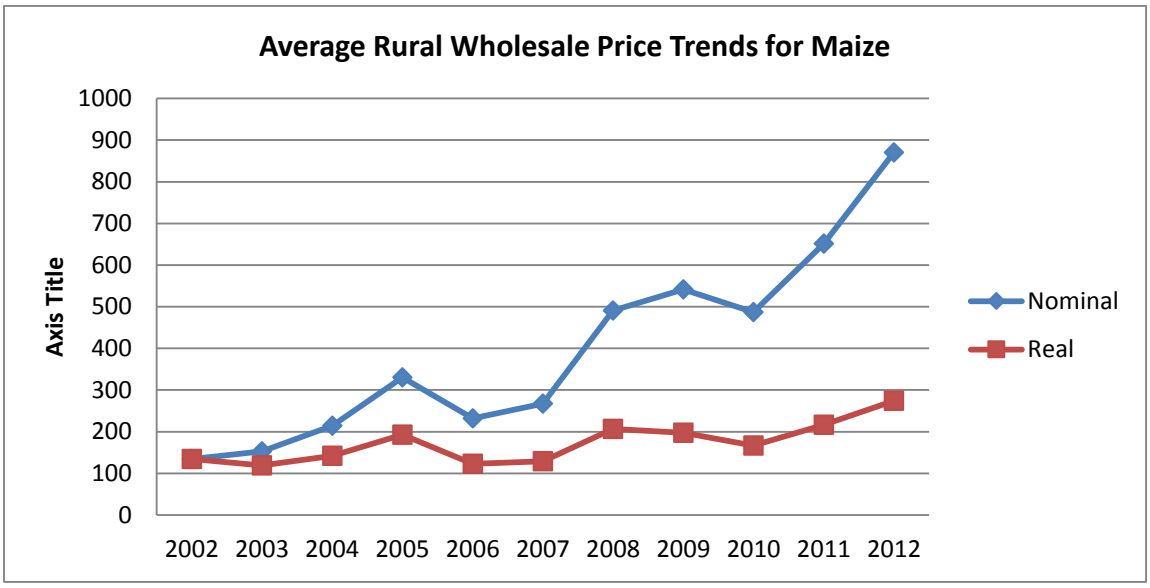

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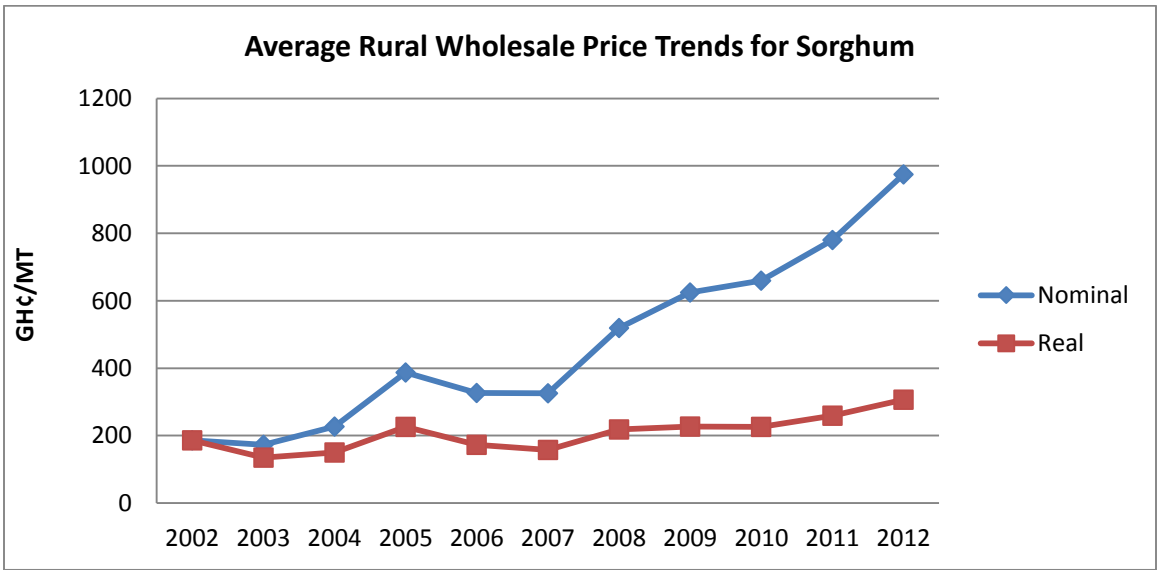

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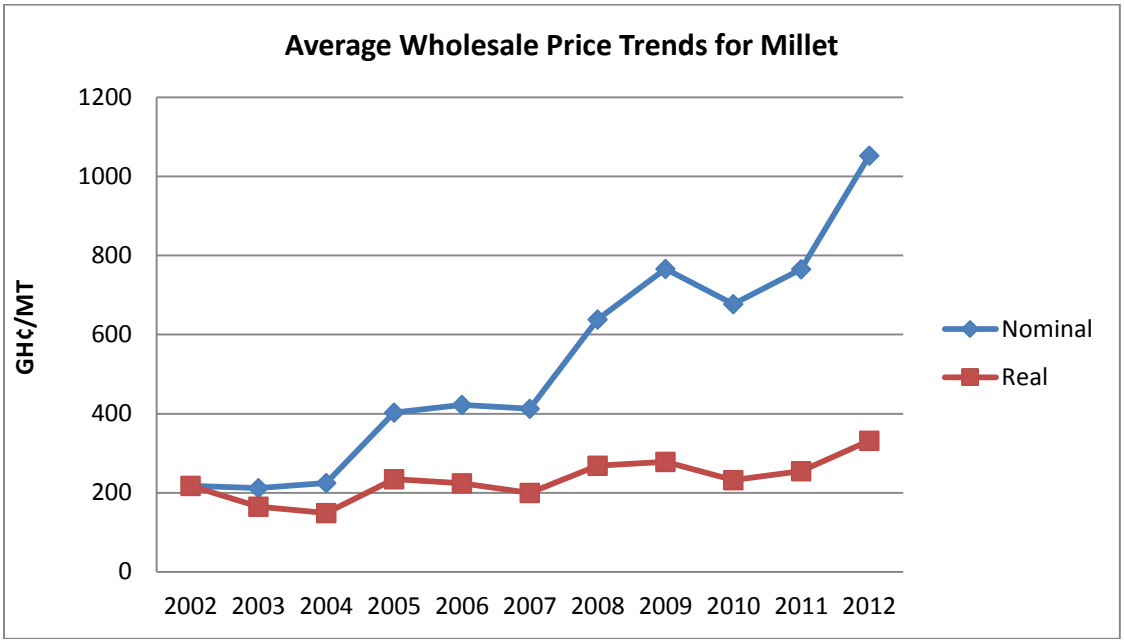
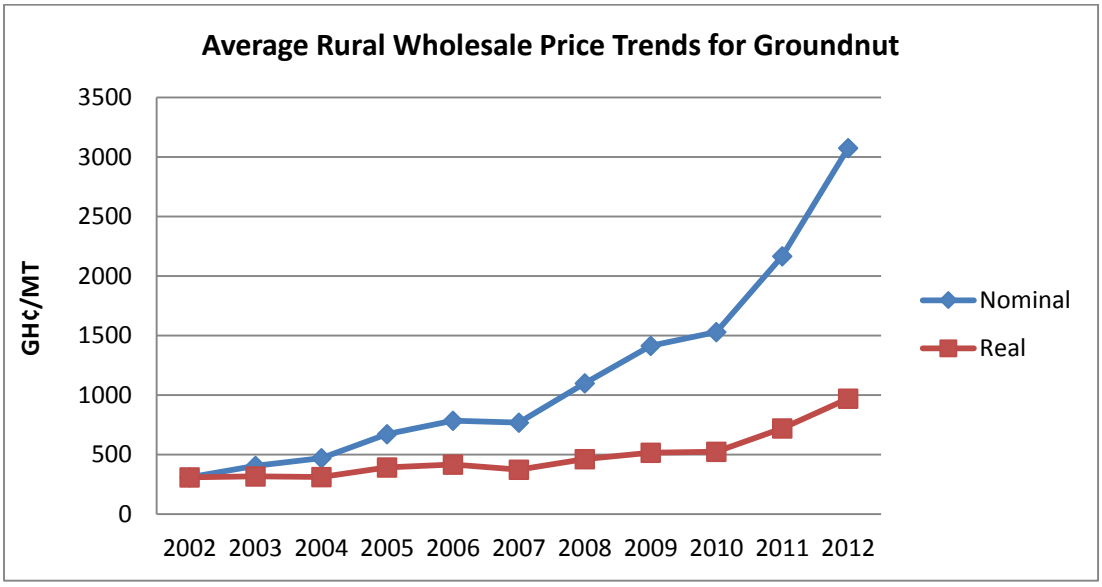
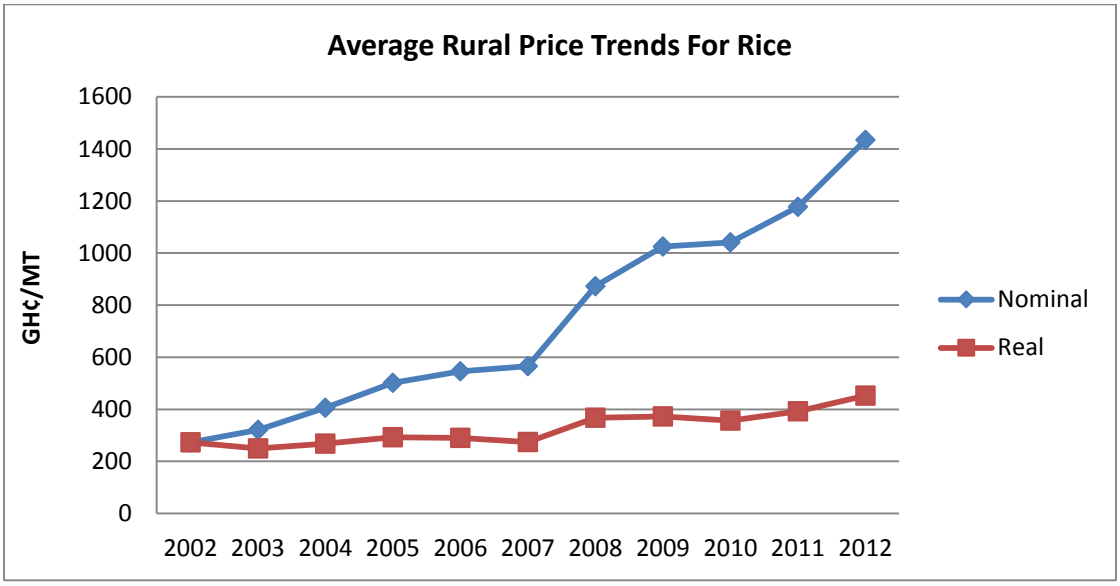

Average Wholesale Price Trends for Millet
GH¢/MT
1200
1000
800
600
400
200
0
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Nominal
Real

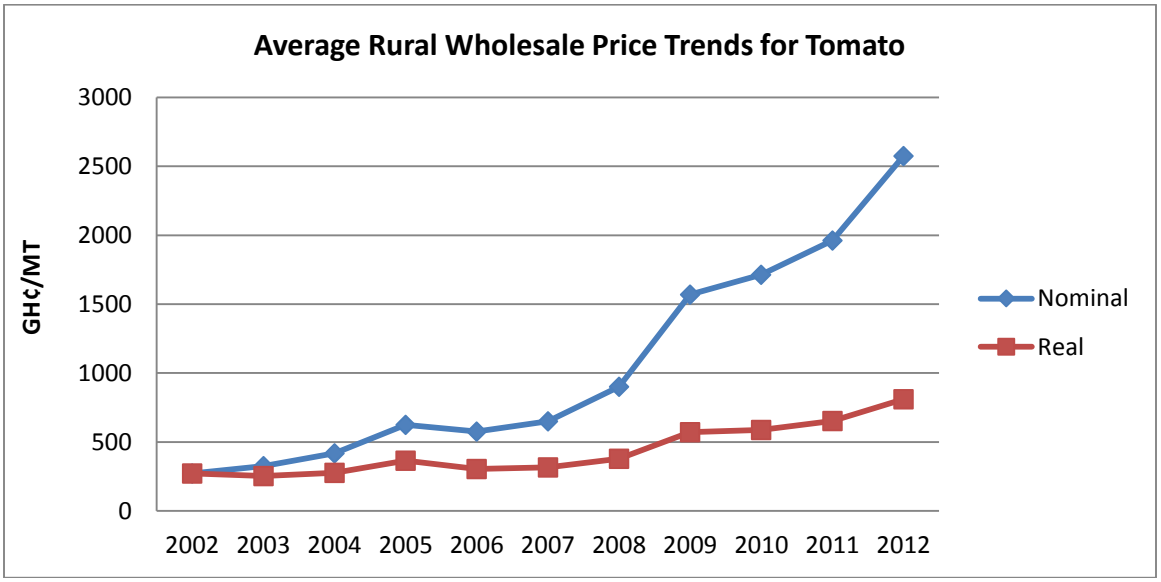
APPENDIX 8


Average Rural Wholesale Price Trends for Groundnut
GH¢/MT
3500
3000
2500
2000
1500
1000
500
0
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Nominal
Real

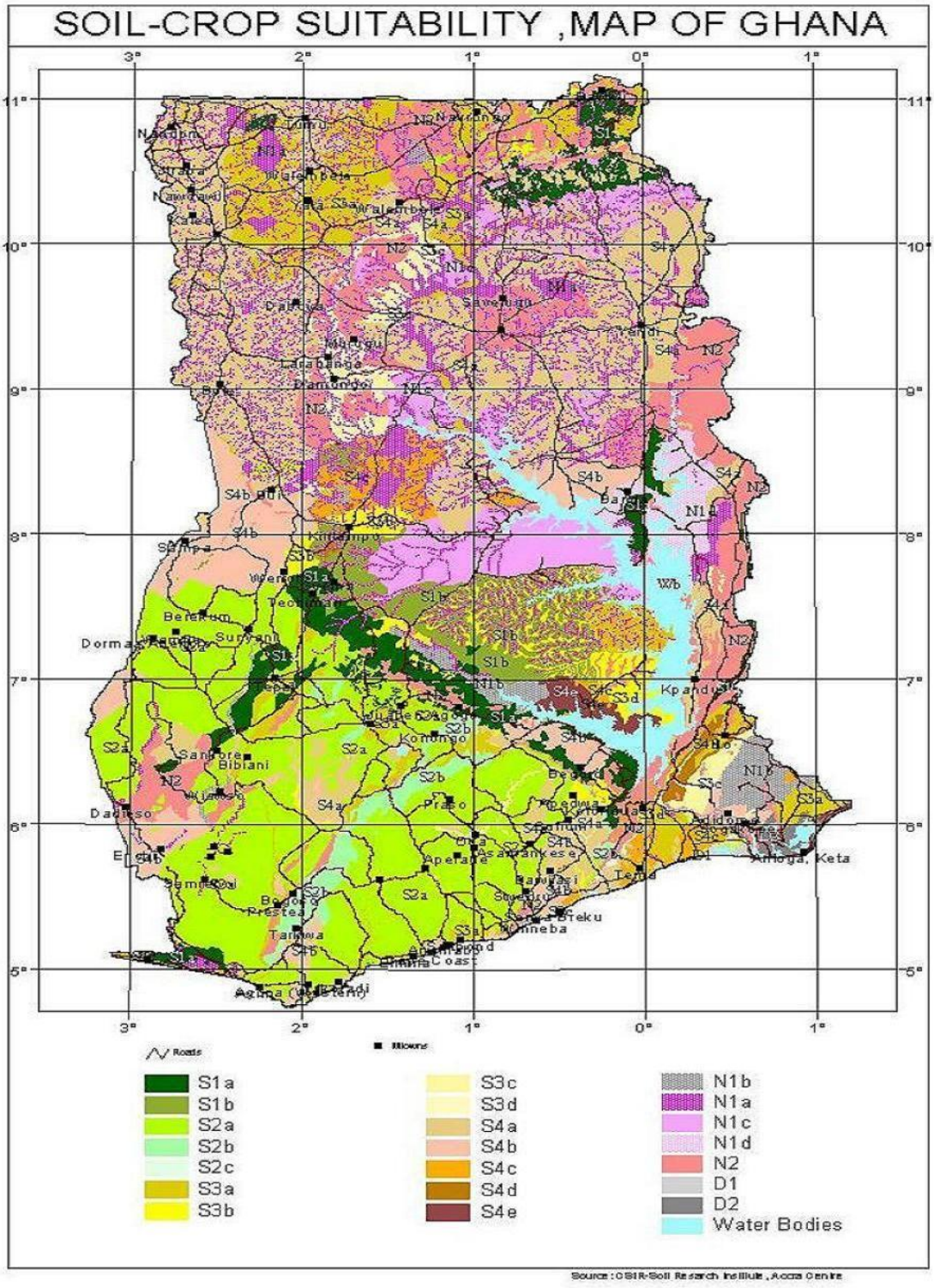
APPENDIX 9



APPENDIX 10



APPENDIX 11


SOIL-CROP SUITABILITY ,MAP OF GHANA
Roads
Rivers
S1a
S1b
S2a
S2b
S2c
S3a
S3b
S3c
S3d
S4a
S4b
S4c
S4d
S4e
N1b
N1a
N1c
N1d
N2
D1
D2
Water Bodies
Source : CSIR-Soil Research Institute , Accra Centre

APPENDIX 11 (cont'd)

LEGEND

S1	Highly suitable areas for extensive mechanized cultivation of export and food crops, (cashew nut, sunflower, pineapples, maize corn, guinea corn, soybean, cassava, yam, cocoyam, plantain, beans etc.).
S1a	Highly suitable soils, non-gravelly medium to moderately heavy textured. Suitable for cocoa, coffee, black pepper, sweet berry, ginger, citrus, cocoyam, banana, rice, sugarcane and vegetables.
S1b	Have same characteristics as S1a above, but are situated in Savanna-transition vegetation zone. These areas are suitable for soybean, maize, yams, guinea corn, millet and groundnuts.
S2	Suitable areas for extensive mechanical cultivation of export and food crops.
S2a	Crop suitability same as S1. Limitation to crop production may be due to gravelly subsoil horizons.
S2b	Crop suitability same as S2a above. Limitation to crop production may be due to either light or heavy textured soils.
S3	Fairly suitable areas for the cultivation of crops such as maize, cassava, vegetables etc.
S3a	May consist of heavy plastic clays mostly imperfectly to poorly drained soils good for mechanized irrigation of rice, sugarcane, vegetables, maize and millet.
S3b	Mostly alluvial soils suitable for maize, guinea corn and vegetables.
S3c	Includes gravelly and moderately shallow soils. Could be hand cultivated for cassava, vegetables and maize.
S4	Fairly to marginally suitable areas for the cultivation of crops.
S4a	Consist of gravelly, moderately shallow to shallow, imperfectly drained soils. Limited to hand cultivation of cassava, citrus, palm oil and mangoes. Soils may occur on upland or undulating of very steep slopes. Problem of soil erosion is predominant.
S4b	Soil may be imperfectly drained sands to loamy sands developed over beach sand or may have clay pan beneath the topsoil. Sandy areas may be used for groundnut and tiger nut cultivation.
S4d	Soils are mainly loose sands developed on coastal sand dunes. Suitable for coconut cultivation. May be mixed with organic manure for vegetable cultivation as in Anloga areas.
N1	Unsuitable areas for upland arable and tree crops.
N1a	Predominantly poor to very poorly drained soils, which may be developed for rice, sugarcane and vegetables.
N1b	Terrace derived alluvial soils, which are dominated by rounded pebbles rendering them unsuitable for mechanized agriculture. May be suitable for maize, cassava, and pepper cultivation.
N1c	Terrace derived soils, which contain surface pebbles and an undurated subsoil horizon. Soils may be left to prevailing grass vegetation for rough grazing of livestock.
N1d	Soils dominated by ground water laterites rendering them imperfectly to poorly drain. May be developed for paddy rice cultivation or vegetation should be left for rough grazing by livestock.
N2	Very unsuitable areas for crop production. Soils are very shallow, gravelly, occurring on steep to very slopes. Should be reserved for forestry, wildlife and watershed protection.
D	Very unsuitable areas for crop production. Soils are very saline and may be utilized for mining of edible salt.

APPENDIX 12

Criteria for Estimating Domestic Meat Production

Livestock	Off Take Rate (%)	Average. Live weight. (Kg)	Carcass (%) of live animal wt.	Carcass Wt.of Animal (Kg)
Cattle	11	250	50	125
Sheep	30	25	60	15
Goats	30	22	60	13
Pigs	80	60	70	42
Poultry	80	1.3	75	1

Criteria:

Meat Production (Mt) = (Off Take Rate (%) x Estimated Population(Table 4.2.3) X Carcass Weight of Animal (kg))/1000

Carcass Weight = Average Live Weight (kg) x Carcass %

APPENDIX 13

PRODUCTION OF SOME MAJOR CROPS IN GHANA: 2000– 2012
(FIGURES IN '000 MT.)

YEAR / CROP	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maize	1,012.7	938.0	1,400.0	1,289.0	1,157.6	1,171.4	1,188.8	1,219.6	1,470.1	1,619.6	1,871.7	1,684.0	1949.9
Rice*	214.6	253.2	280.0	239.0	241.8	236.5	250.0	185.3	301.9	391.4	491.6	464.0	481.1
Millet	169.4	134.4	159.12	176.0	143.8	154.6	165.0	113.0	193.8	245.5	219.0	184.0	179.7
Sorghum	279.8	279.7	316.1	337.7	287.4	299.0	315.0	154.8	331.0	350.6	353.0	287.1	280.0
Cassava	8,106.8	8,965.8	9,731.0	10,239.3	9,738.2	9,567.2	9,638.0	1,0217.9	11,351.1	1,2230.6	13,504.1	14,240.9	14,547.3
Cocoyam	1,625.1	1,687.5	1,860.0	1,804.7	1,715.9	1,685.8	1,660.0	1,690.1	1,688.3	1,504.0	1,354.8	1,299.6	1,270.3
Yam	3,362.9	3,546.7	3,900.0	3,812.8	3,892.3	3,922.8	4,288.0	4376.0	4,894.9	5,777.9	,5860.5	5,855.1	6,638.9
Plantain	1,932.5	2,073.8	2,278.8	2,328.6	2,380.8	2,791.6	2,900.0	3,233.7	3,337.7	3,562.5	3,537.7	3,619.8	3,556.5
Groundnuts	208.6	286.8	520.0	439.0	389.6	420.0	520.0	301.8	470.1	485.1	530.9	465.1	475.1
Oil Palm	1,066.4	1,586.5	1,612.7	1,640.1	1,686.8	1,712.6	1,737.9	1684.5	1,896.8	2,103.6	2,004.3	2,125.6	2,196.1
Beans	63.3	62.5	140.0	145.6	141.4	143.8	167.0	118.9	179.9	204.8	219.3	236.7	223.2

Source: STATISTICS, RESEARCH AND INFORMATION DIRECTORATE (SRID), MIN. OF FOOD AND AGRIC. – 2013.

** Paddy*

APPENDIX 14

AREA OF SOME MAJOR CROPS IN GHANA: 2000 – 2012 (FIGURES IN '000 HA.)

YEAR / CROP	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Maize	694.7	713.3	939.6	791.9	732.9	740.0	793.0	790.1	846.3	954.4	991.7	1,023.2	1,042.1
Rice*	93.6	88.0	122.8	117.7	119.4	120.0	125.0	108.9	132.8	162.4	162.4	197.5	189.5
Millet	208.3	193.0	198.0	206.6	182.2	185.0	200.0	162.7	182.2	186.7	176.7	178.7	172.5
Sorghum	288.7	329.1	337.2	346.0	298.1	305.0	320.0	208.5	275.9	267.2	252.6	243.5	230.8
Cassava	660.1	726.4	794.4	807.2	783.9	750.0	790.0	800.5	839.9	885.8	875.0	889.4	868.5
Cocoyam	247.5	262.4	282.2	276.7	269.5	255.0	260.0	257.5	251.9	224.6	205.3	204.4	196.3
Yam	261.0	287.4	300.0	321.4	310.9	300.0	325.0	323.6	347.6	378.7	384.9	403.8	426.3
Plantain	244.4	265.1	276.9	286.5	281.2	290.0	299.0	305.3	311.8	324.9	328.0	336.5	337.3
G'nuts	217.9	254.5	384.9	464.7	431.7	450.0	480.0	341.6	350.7	336.5	333.4	356.8	345.2
Oil Palm	290.7	281.3	285.3	289.2	295.0	299.0	302.9	299.9	337.8	352.8	343.3	373.2	387.0
Beans	90.8	101.5	180.6	190.4	183.4	180.0	185.0	138.8	161.3	162.7	167.0	182.3	168.8

Source: STATISTICS, RESEARCH AND INFORMATION DIRECTORATE (SRID), MIN OF FOOD AND AGRIC. – 2013

** Paddy*