AGRICULTURE IN GHANA

FACTS AND FIGURES
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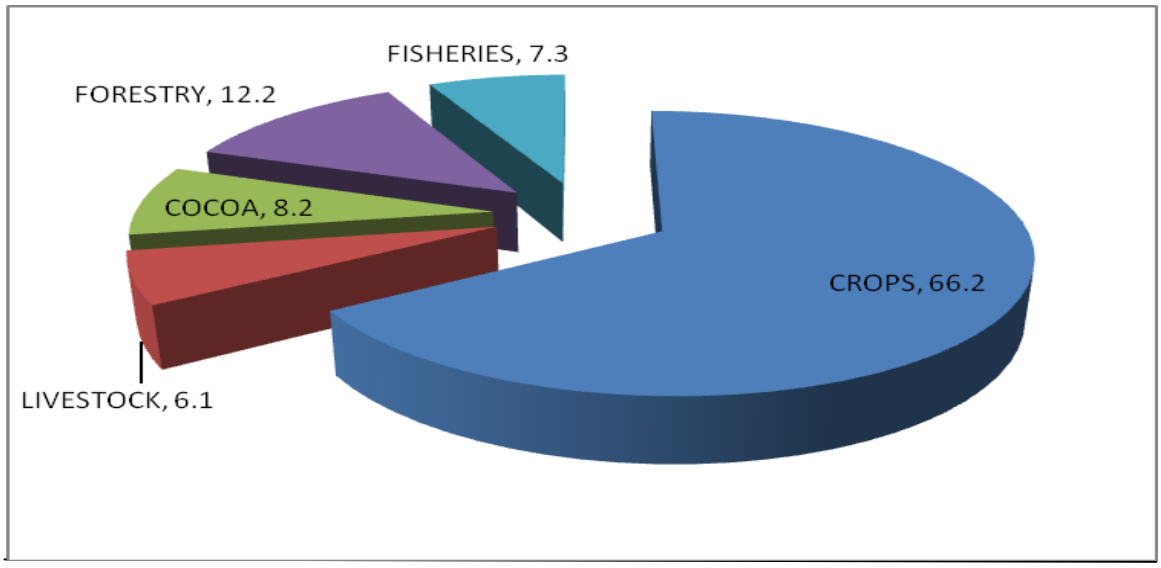
AGRICULTURE IN GHANA : FACTS AND FIGURES

1.0 GEOGRAPHIC AND DEMOGRAPHIC BACKGROUND OF THE COUNTRY

The Country	: Republic of Ghana.
Capital	: Accra.
Population	: 18.9 Million[1]
Population Estimate (2010)	: 24.22 Million[2]
Population Growth Rate	: 2.4% per annum[3]
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	: Gold, Bauxite, Manganese and Diamond.

1.1 AGRICULTURAL SUBSECTORS BY GDP (%)



Source: Ghana Statistical Service, Accra

[1] *2000 National Population and Housing Census*
[2] *2000 National Population and Housing Census*
[3] *2000 National Population and Housing Census*

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.)	23,853,900	100.0	
2.0 Agric. Land Area (A.L.A.)	13,628,179	57.1	(2.0/1.0)
2.1 Area under cultivation (2010)	7,846,551	57.6	(2.1/2.0)
2.2 Total area under irrigation (2010)	30,269	0.2	(part of 2.1)
2.3 Area not under cultivation (2010)	5,781,628	42.4	(2.1/2.0)
3.0 Area under inland waters	1,100,000	8.0	(3.0/1.0)
4.0 Others (forest reserves, savannah woodland, etc)	9,125,721	38.3	(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).

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.

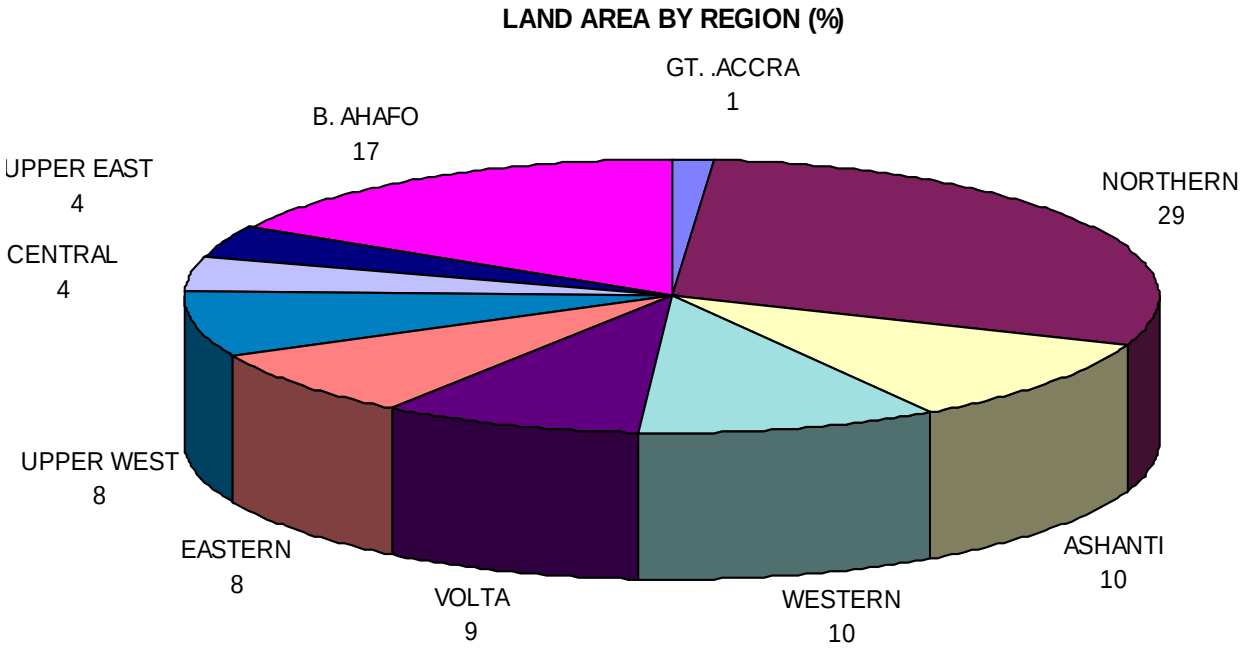


Fig. 1 (Based on Table 2.3)

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, the north is hot and dry. Annual average temperatures range from 26.1^{0}C in places near the coast to 28.9^{0}C 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.

REGIONAL RAINFALL DATA in mm (2001 - 2010)

REGION	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	10-YEAR AV.	30-YEAR AV.	% Change 2010/30-Year Average	% Change 2010/ 2009
WESTERN	1,235	1,720	1,467	1,248	1,355	1,350	1,678	1,518	1,385	1,385	1,471	1,558	12.3	26.3
CENTRAL	1,156	1,305	1,178	949	1,124	1,462	1,330	1,361	1,195	1,195	1,242	1,252	8.5	13.7
GREATER ACCRA	773	899	908	484	693	689	863	914	805	805	790	788	10.5	8.2
EASTERN	1,150	1,583	1,054	1,174	994	1,410	1,328	1,454	1,211	1,211	1,284	1,340	10.2	22.0
VOLTA	1,027	1,263	1,245	1,215	1,139	1,093	1,195	1,436	1,212	1,212	1,183	1,180	(14.5)	(16.7)
ASHANTI	1,136	1,637	1,326	1,098	1,118	1,384	1,542	1,412	1,380	1,380	1,343	1,345	3.9	1.2
BRONG AHAFO	1,170	1,311	1,325	1,362	1,244	1,310	1,312	1,366	1,148	1,148	1,280	1,244	0.5	8.9
NORTHERN	880	1,100	1,420	1,178	1,123	1,014	999	1,223	1,292	1,292	1,204	1,155	57.1	40.5
UPPER EAST	936	898	1,117	613	791	925	1,320	902	884	884	937	912	7.9	11.3
UPPER WEST	968	1,059	1,189	607	897	982	1,089	1,171	1,086	1,086	947	1,022	(58.9)	(61.3)
TOTAL	**10,431**	**12,775**	**12,229**	**9,928**	**10,478**	**11,619**	**12,656**	**12,757**	**11,598**	**11,598**	**11,680**	**11,796**	**37.6**	**54.0**

Source: Ghana Meteorological Agency

3.0 **FARM POPULATION**

3.1 **Rural Population By Region (2010)**

Region	Est. Population (Ghana)			Est. Rural Population		Density (Pers/sq.km)
	Total Population (2010)	Annual Growth Rate	% of Total	Total Rural Population (2010)	% Rural	
Ashanti	4,725,046	2.6	19.1	2,201,405	46.6	194
Gt. Accra	3,909,764	2.8	16.1	480,901	12.3	1,205
Eastern	2,596,013	2.0	10.7	1,697,793	65.4	134
Western	2,325,597	1.8	9.6	1,481,405	63.7	97
Northern	2,468,557	2.9	9.6	1,811,921	73.4	35
Brong-Ahafo	2,282,128	2.2	10.2	1,428,612	62.6	58
Volta	2,099,876	2.4	9.4	1,532,909	73.0	102
Central	2,107,209	2.7	8.7	1,317,006	62.5	214
Upper East	1,031,478	1.1	4.3	869,536	84.3	117
Upper West	677,763	1.5	2.8	559,154	82.5	37
Total or Av.	**24,223,431**	**2.4**	**100.0**	**13,381,109**	**56.2**	**102**

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

3.2 **Economically Active Population (15 to 49 Years) By Region and Sex (2000)**

Region	Total Labour Force	Agriculture (Farming, Forestry, Fishing & Hunting)				Non-Agriculture (Mining, Manufacturing, Services etc)
		Count	Share of Labour Force	Percent Male	Percent Female	Total
Ashanti	1,612,467	706,888	43.8	50.0	50.0	905,569
Gt. Accra	1,377,903	145,034	10.5	55.8	44.2	1,232,869
Eastern	927,699	531,635	57.3	51.4	48.6	396,064
Western	856,830	511,826	59.7	52.5	47.5	345,004
Northern	727,553	523,278	71.2	55.9	44.1	204,275
Brong-Ahafo	819,190	566,066	69.1	51.1	48.9	253,124
Volta	697,752	424,458	60.8	49.8	50.2	273,674
Central	671,003	371,703	55.4	46.5	53.5	299,300
Upper West	241,209	176,600	73.2	51.4	48.6	64,609
Upper East	360,508	242,077	67.1	52.9	47.1	118,431
All Regions	**8,292,114**	**4,199,185**	**50.6**	**48.2**	**51.8**	**4,092,929**

Source: GSS - Based on 2000 Population and Housing Census

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.
- **Starchy and Cereal Staples**: Cassava, Cocoyam, Yam, Maize, Rice, Millet, Sorghum, Plantain.
- **Fruits and Vegetables:** Pineapple, Citrus, Banana, Cashew, Pawpaw, Mangoes, Tomato, Pepper, Okro, Egg Plant, Onion, Asian Vegetables.

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

Crop	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maize	697	695	713	940	792	733	740	793	790	846	954	992
Millet	186	208	193	198	207	182	185	200	163	182	187	177
Rice	105	115	135	123	118	119	120	125	109	133	162	181
Sorghum	312	289	329	337	346	298	305	320	208	276	267	253
Cassava	640	660	726	794	807	784	750	790	801	840	886	875
Cocoyam	372	247	262	282	277	270	255	260	258	252	225	205
Plantain	253	244	265	277	286	281	290	299	305	312	325	328
Yam	243	261	287	300	321	311	300	325	324	348	379	385
Total	**2,808**	**2,719**	**2,910**	**3,251**	**3,154**	**2,978**	**2,945**	**3,112**	**2,958**	**3,189**	**3,385**	**3,396**

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

4.1.3 Area Planted to Other Crops (2010)

Crop	Area ('000 Ha)
Cocoa[1]	1,600.0
Seed Cotton[1]	20.0
Oil Palm[1]	360.0
Tomato[2]	50.0
Other vegetables[2]	20.0
Pineapple[2]	10.0
Others (coconut, banana, kola, rubber, tobacco etc)	2,000.0
Total	**4,060.0**

[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 (%)
	1999 – 2001	**2002 – 2004**		**2005 – 2007**	**2008 – 2010**	
Roots & Tubers:						
Cassava	675.6	795.2	5.43	780.2	866.9	3.51
Cocoyam	294.1	276.1	-2.10	257.5	227.3	-4.16
Yam	213.7	282.8	9.34	310.8	350.0	3.96
Plantain:	254.0	281.5	3.43	298.1	321.6	2.53
Cereals:						
Maize	701.6	821.5	4.60	774.4	930.8	6.13
Millet	195.9	195.6	-0.05	182.6	181.8	-0.13
Sorghum	309.8	327.1	1.81	277.8	265.2	-1.55
Rice (Paddy)	95.6	120.0	7.56	118.0	158.8	9.91
Legumes:						
Groundnuts	236.2	285.8	19.74	423.9	346.9	-6.68
Beans	101.5	184.8	19.97	167.9	163.7	-0.86

Source: Based on Table 4.1.2 and Appendix 14
The average of 2005 to 2007 compared with average of 2008 to 2010 and average of 1999 to2001 compared with average of 2002 to 2004.

4.1.5 **Production of Selected Food Crops ('000 Mt)**

Crop	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maize	1,013	938	1,400	1,289	1,158	1,171	1,189	1,220	1,470	1,620	1,872
Millet	169	134	159	176	144	185	165	113	194	246	219
Rice (paddy)	215	253	280	239	242	237	250	185	302	391	492
Rice (milled)	129	152	168	143	145	142	150	111	181	235	295
Sorghum	280	280	316	338	287	305	315	155	331	351	324
Cassava	8,107	8,966	9,731	10,239	9,739	9,567	9,638	10,218	11,351	12,231	13,504
Cocoyam	1,625	1,688	1,860	1,805	1,716	1,686	1,660	1,690	1,688	1,504	1,355
Plantain	1,932	2,074	2,279	2,329	2,381	2,792	2,900	3,234	3,338	3,563	3,538
Yam	3,363	3,547	3,900	3,813	3,892	3,923	4,288	4,376	4,895	5,778	5,960
Total	**16,833**	**18,032**	**20,093**	**20,371**	**19,704**	**20,008**	**20,555**	**21,302**	**23,750**	**25,919**	**27,559**

Source: SRID, MOFA
Note: Milled rice is estimated to be 60% of paddy.

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

Crop	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maize	101	94	140	129	116	117	119	122	147	162	187
Millet	101	80	94	105	85	92	98	67	115	146	130
Rice	104	123	136	116	117	115	121	90	146	190	239
Sorghum	82	82	92	98	84	87	92	45	97	102	94
Cassava	115	127	138	145	138	136	137	145	161	173	191
Cocoyam	105	110	121	117	111	109	108	110	110	98	100
Plantain	144	151	167	163	166	168	183	187	183	195	194
Yam	106	114	125	128	131	153	159	178	209	247	237

Source: Based on Table 4.1.5 and Appendix 13

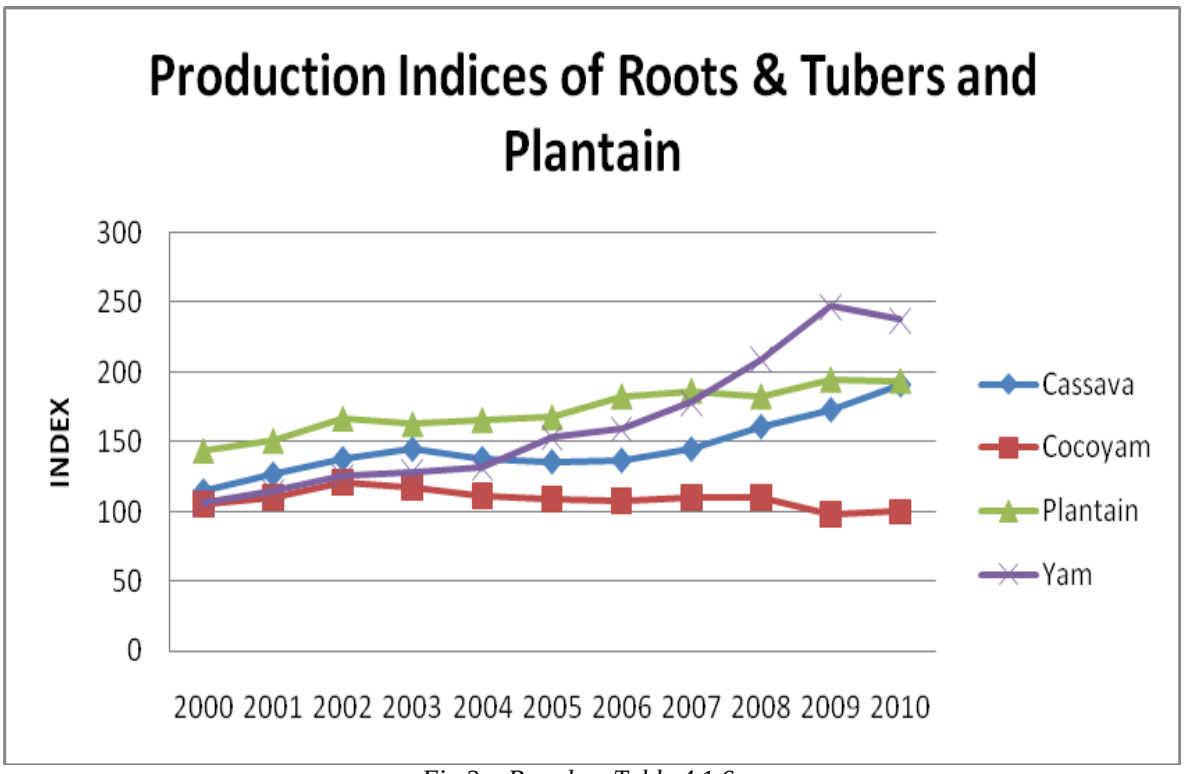


Fig 2a: Based on Table 4.1.6

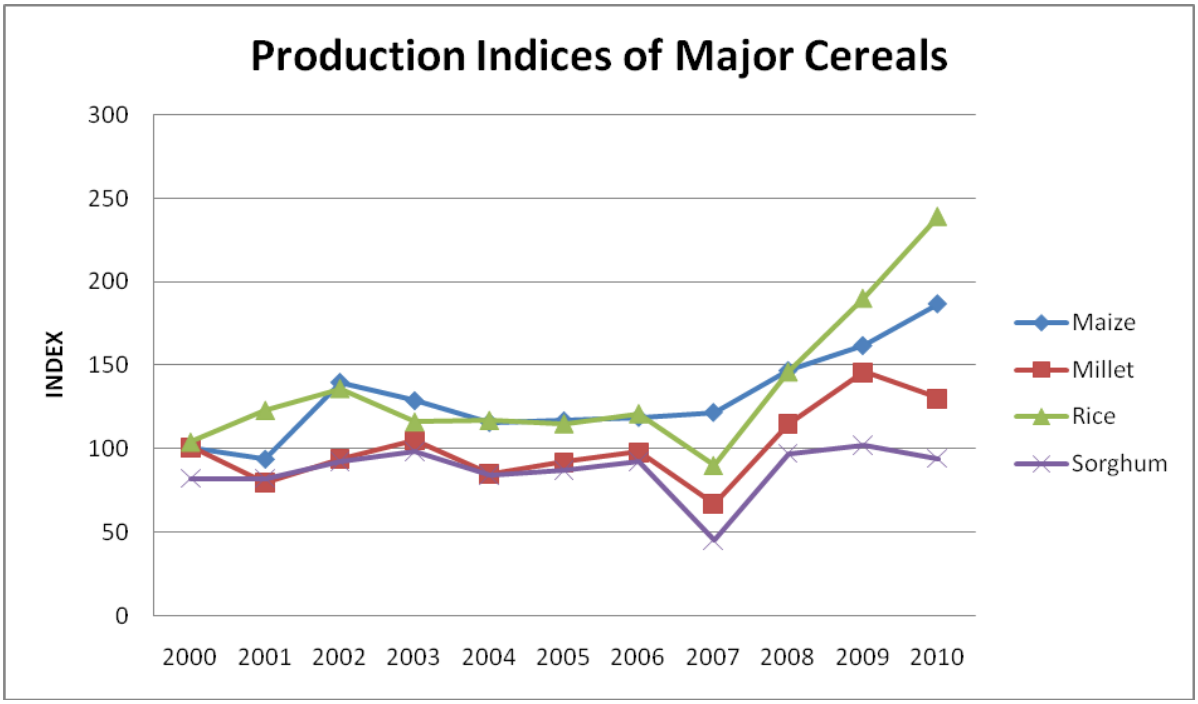


Fig 2b: Based on Table 4.1.6

4.1.7 Mean Annual Production Growth Rates of Selected Crops

CROP	Average Production ('000 MT)		Growth Rate (%)	Average Production ('000 MT)		Growth Rate (%)
	1999 – 2001	2002 – 2004		2005 – 2007	2008 – 2010	
Roots & Tubers:						
Cassava	8,306.0	9,902.8	5.86	9,807.7	12,361.9	7.72
Cocoyam	1,673.3	1,793.5	2.31	1,678.6	1,515.7	-3.40
Yam	3,386.2	3,868.4	4.44	4,195.6	5,544.4	9.29
Plantain:	2,017.6	2,329.4	4.79	2,975.1	3,479.3	5.22
Cereals:						
Maize	988.4	1,282.2	8.67	1,193.3	1,653.8	10.88
Millet	154.5	159.6	1.08	144.2	219.4	13.99
Sorghum	287.2	313.7	2.95	256.3	335.3	8.96
Rice (Paddy)	225.9	253.6	3.86	223.9	395.0	18.92
Legumes:						
Groundnuts	247.7	449.5	19.87	413.9	495.4	5.99
Beans	62.5	142.3	27.43	143.2	201.3	11.35

Source: Based on table 4.1.5 and Appendix 13
The average of 2005 to 2007 compared with average of 2008 to 2010 and average of 1999 to 2001 compared with average of 2002 to 2004.

4.1.8 **Average Yield of Selected Food Crops Under Rainfed Conditions**

Crop	Average Yield (Mt/Ha) 2010	Achievable Yield (Mt/Ha)
Cassava	13.8	48.7
Plantain	11.0	20.0
Yam	15.3	49.0
Cocoyam	6.7	8.0
Maize	1.7	6.0
Rice (Paddy)	2.4	6.5
Cowpea	1.3	2.6
Soybean	1.5	2.3
Groundnut	1.5	2.5
Millet	1.3	2.0
Sorghum	1.3	2.0
Sweet Potato	8.0	24.0
Taro	9.5	12.0
Cocoa	0.4	1.0
Coffee	1.5	-
Cashew	0.8	1.8
Orange	35.0	-
Pawpaw	45.0	75.0
Mango	11.0	-
Pineapple	50.0	72.0
Cotton	0.8	-
Rubber	0.8	-
Tobacco	1.6	-
Tomato	7.5	15.0
Garden eggs	8.0	15.0
Pepper	6.5	32.3

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*					
	1980	1985	1990	1995	2000	2005
1. **Roots & Tubers**						
Cassava	145.2	146.3	148.0	149.7	151.4	152.9
Yam	44.2	43.8	43.3	42.8	42.3	41.9
Cocoyam	-	-	54.0	55.0	56.0	40.0
2. Plantain	82.2	82.5	83.0	83.5	84.0	84.8
3. **Cereals**						
Maize	38.4	39.2	40.3	41.4	42.5	43.8
Rice (milled)	12.4	12.7	13.3	13.9	14.5	15.1
Millet	8.5	9.4	5.1	12.6	9.0	6.4
Sorghum	13.0	14.4	9.3	21.7	14.8	10.1
Wheat	-	-	-	-	8.0	8.0
4. **Fish**	-	-	23.6	24.2	27.0	30.2
5. **Meat**	-	-	8.0	6.3	6.7	7.1

**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, bush meat consumption of 40,000 Mt and import amounting to 20,000 Mt has been considered.
Dashes indicate cells for which information was not available.

4.1.10 Food Balance Sheet (2010/2011)

Type of Commodity	Gross Biological Production (MT)	Available Total Domestic Production Available for Human Consumption* (MT)	Total Imports of Commodities (MT)	Carry Over Stock (MT)	Total Exports of Commodi-ties (MT)	Total Supply of Commodities (MT)	Per Capita Consumption (Kg/Annum)	Estimated Net Consumption of Commodities (MT)	Net Deficit/ Surplus (MT)
CEREALS	**2,710,031**	**2,039,539**	**580,800**	**86,570**	**10,150**	**2,696,759**		**2,005,664**	**691,094**
Maize	1,871,695	1,310,187	18,000	81,980	10,000	1,400,167	43.8	1,060,967	**339,199**
Rice (Milled)**	294,962	256,617	283,000		100	539,517	24	581,352	**-41,835**
Millet	218,952	190,488	1,800	4,590		196,878	1	24,223	**172,655**
Sorghum	324,422	282,247			50	282,197	1	24,223	**257,974**
Wheat	0	0	278,000			278,000	13	314,899	**-36,899**
STARCHY STAPLES	**24,357,105**	**18,515,382**			**9,040**	**18,506,342**		**10,214,839**	**8,291,503**
Cassava	13,504,086	9,452,860				9,452,860	152.9	3,703,697	**5,749,164**
Yam	5,960,486	4,768,389			9,000	4,759,389	125	3,027,875	**1,731,514**
Plantain	3,537,734	3,007,074			40	3,007,034	84.8	2,054,110	**952,924**
Cocoyam	1,354,799	1,287,059				1,287,059	40	968,920	**318,139**
LEGUMES:	**896,080**	**788,212**	**3,730**		**95**	**791,847**		**460,237**	**331,610**
Groundnuts	530,887	477,799	150		45	477,904	12	290,676	**187,228**
Cowpea	219,257	186,369	3,380		0	189,749	5	121,115	**68,634**
Soyabean	145,935	124,045	200		50	124,195	2	48,446	**75,749**

Source: SRID

Notes: Estimated Population for 2010, based on 2010 provisional census figure = 24.22 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 60% of the paddy

4.1.11 **Production of Industrial Crops (Mt.)**

Year	Cocoa[1]	Coffee[1]	Rubber	Sheanut	Oil Palm[2]
1997	322,490	2,880	n.a.	21,504	955,505
1998	409,360	8,370	n.a.	34,886	1,022,010
1999	397,675	3,965	n.a.	17,465	1,031,919
2000	436,634	1,956	11,080	30,771	1,066,426
2001	389,591	1,379	9,784	19,882	1,586,500
2002	340,562	1,464	10,240	27,160	1,612,700
2003	496,846	338	10,924	n.a.	1,640,100
2004	736,975	477	12,347	n.a.	1,686,800
2005	599,318	270	13,619	n.a.	1,712,600
2006	740,458	164	13,618	n.a.	1,737,900
2007	614,532	304	15,318	n.a.	1,684,500
2008	680,800	2,024	14,132	698	1,896,760
2009	710,638	516	19,134	31,386	2,103,600
2010	903,646	n.a.	n.a.	n.a.	2,004,300

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

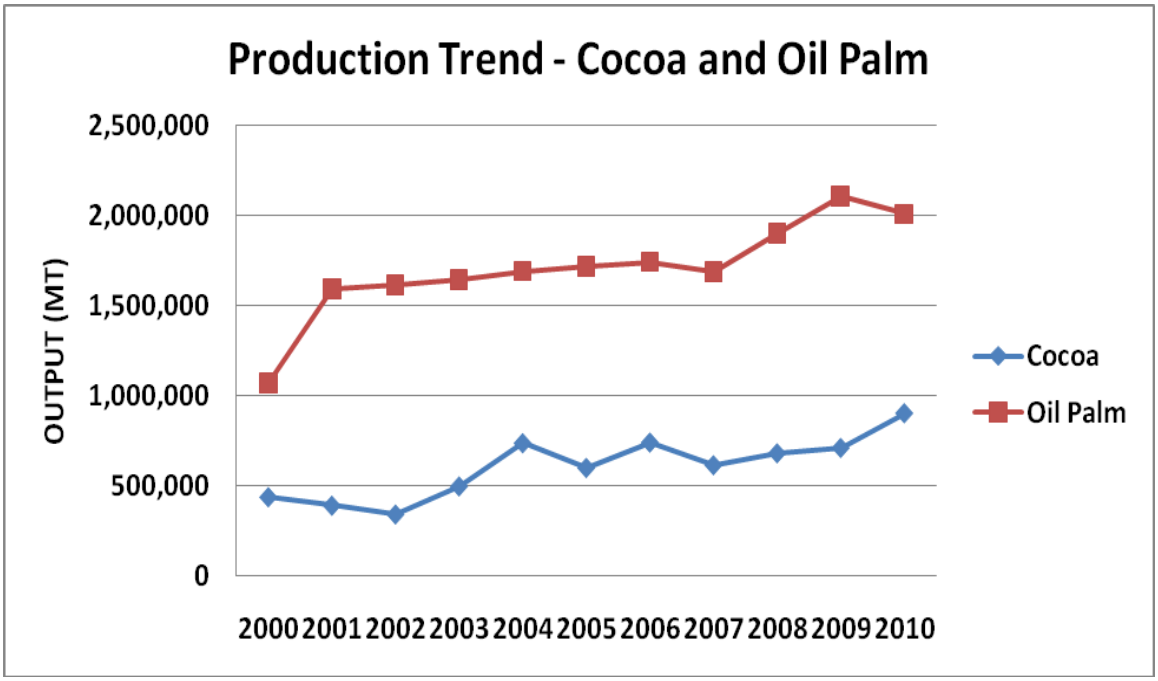


Fig. 3: Based on Table 4.1.11

4.1.12 **Projected Cropped Area and Production of Oil Palm**

Company	2003 ('000)		2004 ('000)		2005 ('000)		2006 ('000)		2007 ('000)		2008 ('000)		2009 ('000)		2010 ('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 (Mt)
GOPDC	7.6	91.5	10.2	122.3	10.5	126.5	10.9	131.2	7.1	85.4	22.35	268.9	25.0	300.0	25.0	300.0
BOPP	6.5	91	5.7	79.2	6.3	86.3	6.3	87.4	6.1	84.4	6.34	87.7	6.0	82.8	5.2	63.0
TOPP	9.5	104.9	10.3	113.8	10.1	108.7	10	107.7	7.4	81.8	12.24	134.1	15.0	163.5	6.3	84.0
NOPL*	6.7	56.6	7.3	62.2	8.1	68.4	8.9	75.3	9.7	82.8	4.00	33.9	6.0	51.0	6.0	51.0
Medium Farms*	0.57	4.6	0.61	4.9	0.66	5.3	0.71	5.8	0.8	6.3	0.74	5.9	0.8	6.3	0.8	6.3
Other Private Holdings*	258.3	1,291.50	260.9	1,304.40	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	300.0	1,500.0
TOTAL	**289.17**	**1,640.10**	**295.01**	**1,686.80**	**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**

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

** 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	2002	2003	2004	2005	2006	2007	2008	2009	2010
GOPDC	19,425.00	19,956.80	26,530.20	27,065.20	28,743.10	17,842.70	18,055.68	20,143.00	20,143.00
BOPP	17,583.00	17,260.00	14,323.00	16,012.00	16,485.00	15,305.00	14,960.18	14,124.00	11,838.00
TOPP	18,688.90	19,892.10	20,588.20	20,223.60	20,348.00	14,797.10	14,249.66	17,373.00	14,688.00
NOPL	4,794.00	5,274.00	5,801.00	6,381.00	7,019.00	7,721.00	8,492.83	12,775.00	12,775.00
AMEEN	6,698.00	7,367.00	8,104.00	8,914.00	9,805.00	10,785.50	11,863.68	11,000	11,000.00
Sub-Total	67,188.90	69,749.90	75,346.40	78,595.80	82,400.10	66,451.30	66,668.32	75,415.00	70,444.00
Medium Scale Mills	5,729.00	6,301.00	6,932.00	7,625.00	8,387.00	9,225.70	10,148.07	10,836.00	10,836.00
Small-Scale and Other Private Holdings	171,366.00	188,503.00	207,353.00	228,089.00	250,888.00	275,976.80	303,572.32	316,222.00	316,222.00
TOTAL	**244,283.90**	**264,553.90**	**289,631.40**	**314,309.80**	**341,675.10**	**351,653.80**	**380,388.71**	**402,473.00**	**397,502.00**

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.

4.2 Livestock Sub-sector

4.2.1 Livestock Population ('000)

Type of Livestock	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cattle	1,288	1,302	1,315	1,330	1,344	1,359	1,373	1,392	1,407	1,422	1,438	1,454
Sheep	2,658	2,743	2,771	2,922	3,015	3,112	3,211	3,314	3,420	3,529	3,642	3,759
Goats	2,931	3,077	3,199	3,230	3,560	3,925	3,923	3,997	4,196	4,405	4,625	4,855
Pigs	332	324	312	310	303	297	290	477	491	506	521	536
Poultry	18,810	20,472	22,032	24,251	26,395	28,727	28,386	34,030	37,038	39,816	43,320	47,752

Source: Veterinary Services Directorate, MoFA, Accra

4.2.2 Index of Livestock Population (1997 = 100)

Type of Livestock	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cattle	102	103	104	106	107	108	109	110	112	113	114	116
Sheep	106	110	111	117	121	125	129	133	137	141	146	153
Goats	110	116	120	121	134	148	148	150	158	166	174	198
Pigs	96	93	90	89	87	86	84	137	141	146	150	153
Poultry	118	129	139	153	166	181	179	214	233	251	273	313

Source: Based on Table 4.2.1.

4.2.3 **Meat Production**

Type of Livestock	Domestic Meat Production (Metric Tons)											
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Cattle	18,029	18,570	19,053	18,288	18,486	18,686	18,874	19,140	19,346	19,553	19,768	19,990
Sheep	11,940	12,298	12,780	13,149	13,568	14,004	14,450	14,913	15,390	15,881	16,389	16,914
Goats	11,216	11,552	12,037	12,597	13,884	15,308	15,300	15,588	16,364	17,180	18,038	18,935
Pigs	11,173	10,056	9,653	10,416	10,181	9,979	9,744	16,027	16,498	17,002	17,512	18,026
Poultry	14,534	13,807	14,580	19,401	21,116	22,982	22,709	27,224	29,630	31,853	34,656	38,202
Total	**66,892**	**66,283**	**68,103**	**73,851**	**77,235**	**80,959**	**76,582**	**92,893**	**97,229**	**101,469**	**106,299**	**112,067**

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

4.2.4 Index of Meat Production (1997 = 100)

Type of Livestock	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cattle	101	105	108	111	107	108	109	110	112	113	114	115	123
Sheep	103	110	113	117	121	125	129	133	137	141	146	151	167
Goats	105	114	117	122	128	141	155	155	158	166	174	183	207
Pigs	98	98	89	85	92	90	88	86	141	145	150	154	156
Poultry	114	131	124	131	175	190	207	205	245	267	287	312	354

Source: Based on Table 4.2.3

4.2.5 Imports of Livestock and Poultry Products in MT

CATEGORY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BOVINE:											
BEEF	631.6	73.2	901.3	1,112.4	2,586.8	6,331.7	10,585.5	16,250.4	13,135.1	12,338.4	12,483.1
BUFFALO	237.9	81.0	162.2	249.6	1,169.2	2,257.1	4,717.3	8,109.0	7,366.8	4,454.5	2,699.5
SUB-TOTAL	**869.5**	**154.2**	**1,063.5**	**1,362.1**	**3,756.0**	**8,588.8**	**15,302.8**	**24,359.4**	**20,501.9**	**16,792.9**	**15,182.6**
POULTRY:											
CHICKEN	9,160.0	6,731.5	19,986.0	32,939.0	39,088.6	40,591.0	44,757.7	63,276.3	89,889.0	67,068.6	70,900.2
TURKEY	385.9	74.1	766.3	1,164.5	1,268.7	1,697.2	3,030.3	3,514.7	3,352.8	1,980.2	1,483.4
DUCK	2.1	2.0	0.0	4.1	0.0	0.0	6.1	0.0	16.0	30.8	34.6
SUB-TOTAL	**9,548.0**	**6,807.6**	**20,752.3**	**34,107.6**	**40,357.3**	**42,288.2**	**47,794.1**	**66,791.0**	**93,257.8**	**69,079.6**	**72,418.1**
OTHER:											
CHEVON	74.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MUTTON	237.4	478.2	1,285.0	2,122.3	2,053.4	3,640.8	4,839.2	6,887.1	5,961.3	6,153.1	4,902.6
PORK	358.1	1,166.1	7,737.5	9,882.3	7,756.4	10,286.8	13,290.5	10,551.5	5,487.4	3,150.2	3,038.9
PROCESSED MEAT	106.8	80.4	133.9	0.0	256.2	270.4	0.0	0.0	0.0	0.0	0.0
SUB-TOTAL	**872.7**	**3,273.2**	**10,021.9**	**12,353.9**	**10,269.3**	**15,753.1**	**18,129.7**	**17,438.6**	**11,448.7**	**9,303.3**	**7,941.5**
MILK	96.0	1,548.5	865.5	349.4	203.3	1,555.1	1,044.2	2,659.9	2,718.9	11,406.4	28,267.5
GRAND TOTAL	**11,290.2**	**10,235.0**	**31,837.7**	**47,823.5**	**54,382.6**	**66,630.1**	**82,270.8**	**111,248.9**	**127,927.3**	**106,582.2**	**125,327.5**

Source: Veterinary Services Directorate (VSD)

4.3 **Fisheries Sub-Sector**

4.3.1 **Annual Fish Production by Source (Mt.)**

Source	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Marine	376,000	333,000	380,000	366,000	290,000	331,412	352,405	322,790	315,530	293,398	343,962	318,300	319,331
Inland	76,000	89,000	88,000	88,000	88,000	75,450	79,000	82,654	83,168	84,757	72,590	70,898	96,105
Total	**452,900**	**422,000**	**468,000**	**454,000**	**378,000**	**406,862**	**431,405**	**405,444**	**398,698**	**378,155**	**416,552**	**389,198**	**415,436**

Source: Directorate of Fisheries, MOFA.

4.3.2 **Index of Annual Fish Production (1997 = 100)**

Source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Marine	96	92	73	84	89	82	82	74	87	80	81
Inland	122	122	122	105	110	106	106	118	121	102	133

Based on Table 4.3.1

4.3.3 **Fish Imports and Exports (2007 – 2009)**

Category	2007 (MT)	2008 (MT)	2009 (MT)	2010 (MT)
Total Fish Imports	212,945	191,657	170,744	199,799
Total Fish Exports	N.A.	N.A.	10,369	8,463

Source: Fisheries Commission

N.A. = Not Available

5.0 SOME SERVICES TO AGRICULTURE

5.1 Credit Support

5.1.1 Sectoral 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			
1997	11.7	5.3	23.1	10.2	1.6	4.6	4.1	24.7	1.6	9.5	3.8
1998	12.2	5.1	24.7	11.2	4.2	5.5	2.0	18.2	2.1	8.7	6.4
1999	12.4	5.7	24.5	9.1	4.2	4.5	3.2	16.8	2.7	9.2	8.1
2000	6.0	3.5	15.0	3.8	2.8	2.8	1.5	8.2	1.7	5.6	4.5
2001	16.8	4.4	21.8	7.7	3.1	4.6	2.6	20.3	3.7	8.6	-
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

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
1997	35.00 – 49.00	35.00 – 49.00	39.00 – 49.00
1998	30.00 – 42.00	31.00 – 45.00	32.00 – 45.00
1999	30.00 – 39.75	31.00 – 39.75	32.50 – 40.00
2000	39.00 – 55.00	39.00 – 55.00	39.00 – 55.00
2001	35.00 – 53.00	35.00 – 53.00	35.00 – 53.00
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

Sources: 1. GSS, Quarterly Digest of Statistics (1997-2002) & 2. (Bank of Ghana) (2003 to 2007)

5.1.3 Basic Information on Banks in Ghana

NO.	Banking License Category	Year Established	Number of Branches as at 2009	Geographical Distribution of Banks
	General Banking License			
1.	Barclays Banks of Ghana Ltd.	1917	142	All Regions
	Class I Banking License(universal)			
1	Ghana Commercial Bank Ltd.	1953	147	All Regions
2	International Commercial Bank Ltd.	1996	11	4 Regions
3	UT Bank (Gh) Ltd.			
4	SG-SSB Bank*	1973	39	All Regions
5	Stanbic Bank	1999	16	3 Regions
6	Standard Chartered Bank Ghana Ltd.	1894	19	5 Regions
7	The Trust Bank Ltd.	1995	16	3 Regions
8	Unibank Ltd.	2000	12	2 Regions
9	Amalgamated Bank Ltd.	1999	11	4 Regions
10	CAL Merchant Bank Ltd.	1990	12	3 Regions
11	ECOBANK Ghana Ltd.	1990	30	5 Regions
12	First Atlantic Merchant Bank Ltd.	1995	4	2 Regions
13	Merchant Bank (Gh) Ltd.	1972	15	5 Regions
14	HFC Bank	2003	11	4 Regions
15	Agricultural Development Bank Ltd.	1965	51	All Regions
16	National Investment Bank Ltd.	1963	25	All Regions
17	Prudential Bank Ltd.	1994	13	3 Regions
18	ARB Apex Bank	2001	10	All Regions
19	Fidelity Bank	2006	8	2 Regions
20	Guaranty Trust Bank	2005	6	3 Regions
21	Intercontinental Bank	2006	14	4 Regions
22	United Bank of Africa	2004	18	3 Regions
23	Zenith Bank (Ghana) Ltd	2005	11	5 Regions
24	Bank of Baroda	2008	1	1 Region
25	Banque Sahelo-Saharienne Pour L'Investissement et le Commerce (BSIC)	2008	2	1 Region

Source: Bank of Ghana

**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	cri@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	0302-500195/508134-7	info@iir.csir.org.gh, industrialresearch@iir.csir.org.gh
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 (BNARI)	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	1999	2001	2003	2006	2007	2008	2009	2010*
Professional	752	633	738	783	793	1,099	1,099	1,099
Sub-Professional	420	529	575	527	530	579	579	579
Technical	3,139	2,947	3,065	2,816	2,831	2,757	2,757	2,757
Support Staff [2]	2,842	2,508	2,606	2,175	2,293	2,168	2,168	2,168
Total	**7,153**	**6,617**	**6,984**	**6,312**	**6,510**	**6,603**	**6,603**	**6,603**

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

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

5.3 Agricultural Mechanization

5.3.1 Agricultural Machinery and Equipments

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
	Huricane slashers	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
	Rice Reapers	30
	Grain Prococoons (50MT)	100
	Grain Prococoons (20MT)	150
	Rice Destoner	2
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

Source: Agricultural Engineering Services Directorate, MOFA

5.3.2 Total Area Under Irrigation (2009 & 2010) HA

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

Source: Ghana Irrigation Development Authority, MOFA

6.0: SOME AGRO-PROCESSING FIRMS

Name	Product	Location	Contacts
Pastry and Confectionery Products			
Elsa Foods Ltd	Process Local Food into Flour Products	Kpone Near Tema P.O. Box 7565, Accra	Mrs. Elizabeth Maldini Tel: 0244257239 Email: elsafoodsgh@gmail. Com
Vincom Processing Ltd	Production of Various Type of Biscuits & Confectionery	Accra P.O. Box 5558, North Kaneshie	Mr. Sobi Mob.: 0277860888 030281200-3
Cocoa Products and Preparations			
Philio Delio Smile Food	Cocoa Beverage	Tesano, Behind Tesano Sports Club, Near Mizpa Int. School	Philomena Yaa Asantewaa Debrah, P.O. Box 19205, Accra-North Email: philiodelio@yahoo. com 0302234703, 0302667249, 0208127757, 0242167759
Tik-Tak	Cocoa Beverage	Odorkor No.1, Odorkor Light Industrial Area, Opp. Tipper Junction, Accra North	0302323471 0244264780
Fish and Sea Food			
Ghana Agro Foods Company (GAFCO)	Mfg of Canned Fish, Vegetable Oil, Cassava chips, wheat flour, feed etc.	Tema	Mr. Erasmus Twentor (HRM), P.O. Box 113345, Tema Tel: 0303204121-4
Fruits and Vegetables			
Akua Mansah Dansoman Ent.	Fruit Juice Production	Near Agya Pa Ye, North Kaneshie-Fadama Rd., Assemblies of God	Mr.Adjei Darko-MD 0242-148462 P.O. Box GT 498, Accra Email: fuji2kus@yahoo.com
Bella Ind.	Fruit Juice Production	New Legon Estates	Mr. Daniel Pappoe (MD) P.O. Box 2435, Osu-Accra Email: danpap11@yahoo.com Tel: 0244-789794

Name	Product	Location	Contacts
Fruito foods Processing Ltd. (New) (Christview Ltd.)	Fruit Juice Production	Hse No. 50/B495, Sowutuom,b/4 Pentecost Uni.junction	Mr. James Amo Anokye 0244-877446,0302-226557,0243-473857, P. O. Box NT85 Accra New-Town
Cocks Co. Ltd.	Fruit Juice Production	Hse. No. K9,Motorway Residential Area	Godwin Semanu Tel: 0202905252 P.O. Box AN5038, Accra-North 0202-001336, 0303-303426 Email: info@cocksjuices.com ransahaddo@yahoo.com
Gabrho Ltd.	Fruit Juice Production	14 6f11 Rd, Tesano	Paul Mensah, Box GP17811, Accra Samuel Godwin Eshun(MD) 0302234769/0244267043, 0244371121
Jubilee Industrial Complex	Fruit Juice Production	North Kaneshie Swan lake Near Fairborn	Robert Adjei (MD) 020- 8176141, P. O. Box GP948, Accra drakgh@yahoo.com
Kies-Maddox Enl.	Fruit Juice Production	Opp. Prince Boateng School, Nsawam GCB, Turn right & ask	Mr. Wontumi-MD 020-8140828
Safrex Co. Ltd	Fruit Juice Production	Near Timber Market Roundabout, behind AMAL Bank	Emmanuel Ebosaah Abekah 0303-208803,0277-434128, 0243-366652, P. O. Box SC 42, Tema
N & C Food	Fruit Juice Production	Plot 1-20 Indus. Area Essuehyia, Ekumfi	Mr. Nat Welbeck (CEO) 0264837144 P.O. Box CT1076, Cantonments-Accra Email : ncfoodltd@yahoo.com Andrew Aact (Special Asst.) 0249623502
Nourisher Processing Ltd.	Fruit Juice Production	North Industrial Area, near old Melcom, 45 Dadeban Road	Mr. Yeboah 0244612958 P.O. Box AN6095 Accra-North

Name	Product	Location	Contacts
Prospects Consortium Ltd.	Fruit Juice Production	Shop No. T6167, Gial Weija	Mr. Adotey 0244-444405,0302-221839, P. O. Box GP 3459, Accra
Promotra Foods Ltd.	Fruit Juice Production	GICEL Estates, Weija (B161), near DVLA	Eric Papafio (MD) 0244-663109
Royal Oasis Ghana Ltd.	Fruit Juice Production	Lapaz Motorway Extension near Ashawo Market	Abraham Hayfron 0264811418 021-413189, 021-406407, P. O. Box KN 661, Accra
Stay Sweet Sugar Ltd	Fruit Juice Production	Behind Memory Guest House, Near Agona District Assembly Office, Swedru	Major Sam-MD, 0244-715931 0302-221798, 020-8138249, P. O. Box AN16731,Accra-North
Blue Sky Products (Ghana) Ltd	Processing of Fresh Exotic Fruits	Ankwa Dobro, near Amasaman	Ruth Smith-Adjei 0244329344 P.O. Box CT 3506 Cantonments-Accra Email: ruth@blueskyproducts. Com
Oil Processed Products			
Norpalm Ghana Ltd.	Processing of Palm Fruits into Palm Oil and other related products	Sese near Prestea, Western Region	Managing Director 0244-651840 Fax: 0277-451837
Ghana Oil Palm Development Company (GOPDC)	Palm Oil	Kwae via Kade, Eastern Region Plot No.MS 3, Main Harbour Road, Tema	Managing Director 0244-330090, 0303204150, 0303204151 P.O. Box M-428, Accra Fax: 03429-22383, 0303202670
Twifo Oil Palm Plantation (TOPP) Ltd.	Palm Oil	Twifo Ntafrewaso, Cape Coast, Central Region	Managing Director P.O. Box 138, Cape Coast Tel: 03322-28180/28181-2 Fax: 0332132702 Swanmill, Box M-390, Accra Tel: 0302664833/664985, Fax: 0302662969

Name	Product	Location	Contacts
Benso Oil Palm Plantation (BOPP) Ltd.	Palm Oil	Benso, Western Region	Managing Director P.O. Box 470, Takoradi Tel: 0312024119 Fax: 0312021683
Juaben Oil Mills Ltd.	Palm Oil	Juaben, Ashanti Region	Managing Director Tel: 0244887200
Ayiem Oil Mills Ltd.	Palm Oil	Ayiem, Western Region	Managing Director AR 62, Airport Ridge P.O. Box 865, Takoradi Tel: 0243688123, 0244573168
Other Processed Products			
Spring wave Investment Ltd.	Fruit Juice Production	Near Goil Filling Station Adenta	Vivian Adiku P.O. Box 14140, Dansoman-Accra 0244-667073 John Agbenyegah (Asst.) 0248532612

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

7.0 **AGRICULTURAL COMMODITY PRICES**

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

CROPS	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CASSAVA	86.81	67.02	54.02	87.39	112.79	107.97	111.31	152.75	189.50	223.57
YAM	136.80	167.56	170.82	204.88	262.67	265.77	292.27	380.00	462.54	507.91
PLANTAIN	125.00	99.38	105.00	231.39	230.92	269.65	302.72	340.10	433.85	554.11
COCOYAM	104.40	136.64	138.61	195.22	220.95	248.92	293.99	349.28	409.14	509.15
MAIZE	150.00	134.13	152.94	214.53	330.47	231.61	266.99	491.27	541.97	487.40
SORGHUM	160.55	186.22	172.56	227.00	387.57	327.00	326.05	519.55	624.64	659.30
G/NUT	356.10	307.42	404.83	469.56	670.69	783.61	769.45	1099.71	1414.72	1528.55
MILLET	225.81	217.33	211.70	224.52	403.10	422.35	412.72	638.41	766.33	677.38
RICE	238.00	272.97	320.30	405.74	501.36	545.95	565.83	873.04	1025.72	1040.83
TOMATO	346.15	271.00	325.01	417.39	624.47	575.48	649.44	899.83	1569.95	1713.19

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
CASSAVA	305	493	637	610	629	862	1,070	59
YAM	321	385	494	500	550	715	870	161
PLANTAIN	268	591	590	689	773	869	1,108	218
COCOYAM	289	407	460	518	612	727	852	179
MAIZE	233	326	503	352	406	748	825	239
SORGHUM	277	364	622	525	523	834	1,003	221
G/NUT	293	340	486	567	557	796	1,024	685
MILLET	289	306	550	576	563	871	1,045	229
RICE	329	416	514	560	580	896	1,052	372
TOMATO	296	380	569	524	592	820	1,430	694

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
CASSAVA	42.12	57.84	65.73	57.25	53.91	64.24	68.90	76.62
YAM	133.19	135.61	153.08	140.92	141.57	159.82	168.17	174.06
PLANTAIN	81.87	153.15	134.57	142.98	146.63	143.04	157.73	189.89
COCOYAM	108.07	129.21	128.76	131.99	142.40	146.91	148.75	174.49
MAIZE	119.25	141.99	192.59	122.81	129.32	206.63	197.04	167.03
SORGHUM	134.54	150.25	225.87	173.39	157.93	218.52	227.10	225.94
GROUNDNUT	315.64	310.79	390.86	415.50	372.69	462.53	514.35	523.83
MILLET	165.06	148.61	234.92	223.95	199.91	268.51	278.61	232.14
RICE	249.74	268.55	292.18	289.49	274.07	367.19	372.92	356.69
TOMATO	253.41	276.26	363.93	305.14	314.57	378.46	570.79	587.11

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
CASSAVA	63	86	98	85	80	96	102	114
YAM	79	81	91	84	84	95	100	104
PLANTAIN	82	154	135	144	148	144	158	191
COCOYAM	79	95	94	97	104	108	109	128
MAIZE	89	106	144	92	96	154	147	125
SORGHUM	72	81	121	93	85	117	122	121
GROUNDNUT	103	101	127	135	121	150	167	170
MILLET	76	68	108	103	92	124	128	107
RICE	91	98	107	106	100	135	137	131
TOMATO	94	102	134	113	116	140	211	217

Based on Table 7.3

7.5 **National Average Input Prices (GH ¢)**

Input	Unit	2004	2005	2006	2007	2008	2009	2010	Change % 2006-07	Change % 2007-08	Change % 2008-09	Change % 2009-10
15-15-15	50kg	18.87	20.22	20.44	21.72	36.06	43.40	37.57	6.3	66.0	20.37	-13.44
Sulphate of Ammonia	50kg	14.22	15.80	17.54	18.10	28.12	31.69	27.34	3.2	55.4	12.69	-13.71
Urea	50kg	18.94	22.94	24.56	25.82	37.13	41.42	35.47	5.1	43.8	11.54	-14.37
Round Up	1 litre	7.06	6.73	6.60	6.24	8.93	10.48	10.82	-5.5	43.1	17.32	3.28
Karate	1 litre	7.91	6.92	6.94	7.10	8.28	8.40	8.21	2.3	16.6	1.40	-2.2
Actellic	1 litre	15.00	14.88	12.83	12.82	11.35	10.83	12.82	-0.1	-11.5	-4.54	18.34
Hoe	Single	1.24	2.38	1.73	2.03	2.51	3.10	3.60	17.5	23.6	23.59	15.96
Cutlass	Single	2.71	3.37	3.37	4.08	4.05	4.60	5.65	21.2	-0.7	13.48	23.90
Jute Sack	Single	0.75	0.82	0.89	0.86	0.99	1.48	1.71	-3.6	15.1	49.59	15.47

Source: SRID, 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
1. Crops	63.8	63.8	67.1	68.8	66.2
2. Cocoa	9.0	8.5	7.5	7.4	8.2
3. Livestock	7.5	7.2	6.3	5.9	6.1
4. Forestry	12.3	13.2	11.1	11.2	12.2
5. Fisheries	7.5	7.2	8.1	7.1	7.3

Source: SRID Calculations from Budget Statement and Economic Policy of the Government of Ghana and Ghana Statistical Service

8.2 Share of Agriculture in GDP (%)

Year	Sector			
	Agriculture	Service	Industry	Real GDP @ Constant 1993 Purchases Value (GH¢-Million)
1997	40.4	31.6	28.0	453.39
1998	40.6	32.1	27.4	474.67
1999	40.5	31.9	27.6	495.69
2000	39.6	32.7	27.8	514.21
2001	39.6	33.0	27.4	535.71
2002	39.5	33.0	27.5	560.08
2003	39.8	32.8	27.4	589.47
2004	40.3	32.6	27.2	622.35
2005	39.5	32.9	27.6	658.87
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	30,179
2009*	31.7	49.5	18.9	36,867
2010*	30.2	51.1	18.6	44,799

Source: Ghana Statistical Service, Accra
Note: Figures won't add up to 100 where the proportion of Net Indirect Taxes has been deducted.
***** *GDP at 2006 Base Price*

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

Year	Sector			
	Agriculture	**Services**	**Industry**	**National**
1997	4.3	6.5	6.4	4.2
1998	5.1	6.0	3.2	4.7
1999	3.9	5.0	4.9	4.4
2000	2.1	5.4	3.8	3.7
2001	4.0	5.1	2.9	4.2
2002	4.4	4.7	4.7	4.5
2003	6.1	4.7	5.1	5.2
2004	7.5	4.7	4.8	5.8
2005	4.5	5.4	7.7	5.8
2006	4.5	6.5	9.5	6.2
2007*	-1.7	7.7	6.1	4.5
2008*	7.4	8.0	15.1	9.3
2009*	7.6	6.8	4.5	6.5
2010**	4.8	8.2	6.0	6.8

Source: Budget Statement and Economic Policy of the Government of Ghana and Ghana Statistical Service
** Growth Rates of GDP at 2006 Constant Prices.*
*** Provisional Figures*

8.4 **Growth Rates in Agricultural Sub-Sectors (%)**

Year	Sub-sector					National Agric. Real GDP Growth Rate
	Crops**	**Livestock**	**Cocoa**	**Fisheries**	**Forestry**	
1997	4.5		4.0	1.0		4.3
1998	4.4		11.0	1.8		5.1
1999	4.7		-0.5	1.0		3.9
2000	1.1		6.2	1.6	11.1	2.1
2001	4.6		-1.0	2.0	4.8	4.0
2002	5.2		-0.5	2.8	5.0	4.4
2003	5.3		16.4	3.0	6.1	6.1
2004	5.4		29.9	3.5	5.8	7.5
2005	3.3		13.2	-1.2	5.6	4.1
2006	3.5		2.0	15.0	2.6	4.5
2007*	4.0	4.7	-8.2	-7.2	-4.1	-1.7
2008*	5.8	5.1	3.2	17.4	-3.1	7.4
2009*	6.9	4.4	5.0	-5.7	3.5	7.6
2010*	5.0	4.7	4.6	5.0	3.8	4.8

Source: Budget Statement and Economic Policy of the Government of Ghana and Ghana Statistical Service.
** Growth Rates of GDP at 2006 Constant Prices.*
*** Crops GDP 1997-2006 refer to Crops/Livestock*

8.5 Share of MoFA Budget in Government Budget. (In Million GH Cedis)

Expenditure Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010**
Total Central Gov't Expenditure	329.54	1307.38	1544.70	1044.21	1051.32	1269.38	1791.20	5624. 59*	8009. 53*	8345.5*	
Total Expenditure on Agriculture:	5.78	6.25	12.70	13.67	14.27	20.98	25.69	33.83	126.68	165.01	
Development Expenditure	2.23	1.85	6.14	2.14	3.82	9.68	11.96	14.42	68.31	89.63	
Recurrent Expenditure	3.55	4.40	6.56	11.53	10.45	11.30	13.73	19.41	58.37	75.38	
Total Expenditure on Agriculture (%)	1.75	0.48	0.82	1.30	1.36	1.65	1.43	1.29	1.58	1.98	

Sources: 1. Budget Division, MoFA, Accra 2. Ghana Statistical Service, Accra.
** Bank of Ghana, ** Data not yet received from Bank of Ghana*

8.6 Recent Performance of Non-Traditional Agricultural Exports

Items	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009	2010
Total Volume of Non-Traditional Agric. Exports ('000 MT)	-	-	-	-	-	415.8	399.8	316.6	356.5	293.2	299.5	299.5
Value of non-traditional agricultural exports in US $m	74.5	67.3	85.7	138.1	159.8	151.9	203.4	197.3	196.8	150.9	164.9	164.9
Total Value of all non-traditional Exports US $m.	400.7	418.3	504.3	588.9	705.4	777.6	892.9	1,164.5	1,341.0	1,215.0	1,629.2	1,629.2
Contribution(%) of non-traditional agricultural exports	18.6	16.1	17.0	23.5	22.7	19.5	22.8	16.9	14.7	12.4	12.4	10.1

Source: Ghana Export Promotion Council, Accra.

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

Commodity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	% Change (09-10)
Horticultural:												
Pineapple	28,512	34,933	46,391	45,145	71,805	46,694	60,751	40,456	35,134	31,567	40,141	27.2
Cotton Seed	10,051	15,578	6,297	9,145	9,933	7,355	5,354	5,337	3,711	1,201	419	-65.1
Kola nut	6,413	6,435	11,559	9,032	2,353	816	945	6,753	4,966	5,182	7,878	52.0
Yam	12,463	9,630	13,025	7,973	16,169	18,377	20,297	19,716	20,842	17,571	19,485	10.9
Oranges (Fresh or dried)	1,242	1,336	15,213	4,307	742	5,846	6,283	3,674	10,991	11,028	10,729	-2.7
Vegetables	2,033	4,539	4,961	4,369	607	0	-	6	NA	2,342	3,695	57.8
Banana	3,883	3,251	3,233	364	725	1,117	44,098	52,069	69,779	47,613	64,202	34.8
Mangoes	268	232	126	234	376	407	182	824	858	435	291	-33.1
Pawpaw	1,748	1,792	1,474	1,917	3,752	3,212	1,912	1,194	968	891	812	-8.9
Fish & Seafoods:												
Tuna Fish	13,733	16,881	17,810	13,431	26,600	19,448	45,476	45,119	26,816	19.325	20,632	6.8
Fish (NES)	6,720	5,122	1,779	5,321	18,589	69,936	28,052	18,169	12,394	10,695	4,855	-54.6
Lobsters/Shrimps, etc.	247	212	377	705	1,143	203	401	493	258	18	75	316.7
Cuttle Fish/Octopus	-	13,693	449	795	4,485	594	1,284	896	557	149	388	160.4
Processed & Industrial:												
Cashew Nuts	3,564	419	3,892	6,338	51,764	14,487	34,962	23,616	81,190	52,965	57,095	7.8
Cocoa Products		81,042	67,615	63,933	58,297	43,121	80,426	-	107,860	-	-	-
Raw/ Lint Cotton	10,847	10,323	3,640	40,302	3,551	3,862	5,793	3,772	3,662	-	729	-
Robusta Coffee	6,742	3,036	1,326	769	682	585	214	1,464	2,023-	1,346	1,737	29.0
Sheanuts	35,983	45,281	27,627	66,997	5,548	165,508	104,747	57,166	55,488	67,826	41,219	-39.2

Source: Ghana Export Promotion Council (GEPC), Accra. *-Not Available or cannot be estimated.*

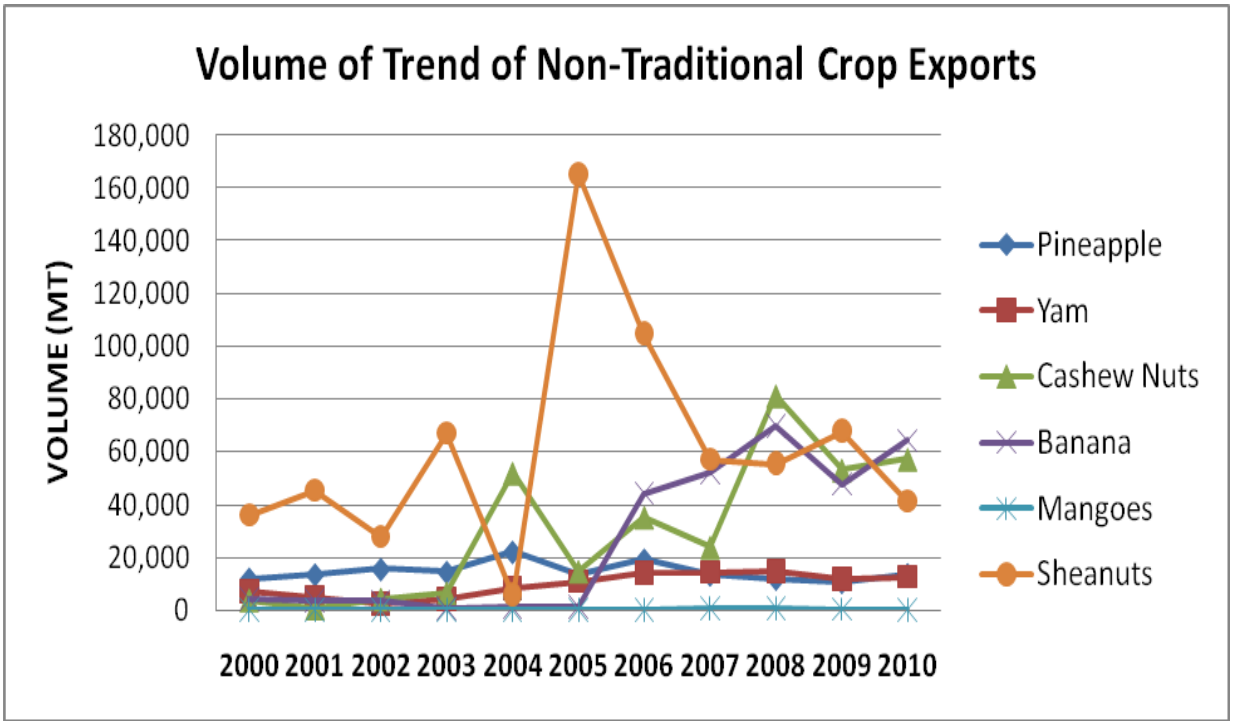


Fig 4: Based on Table 8.7

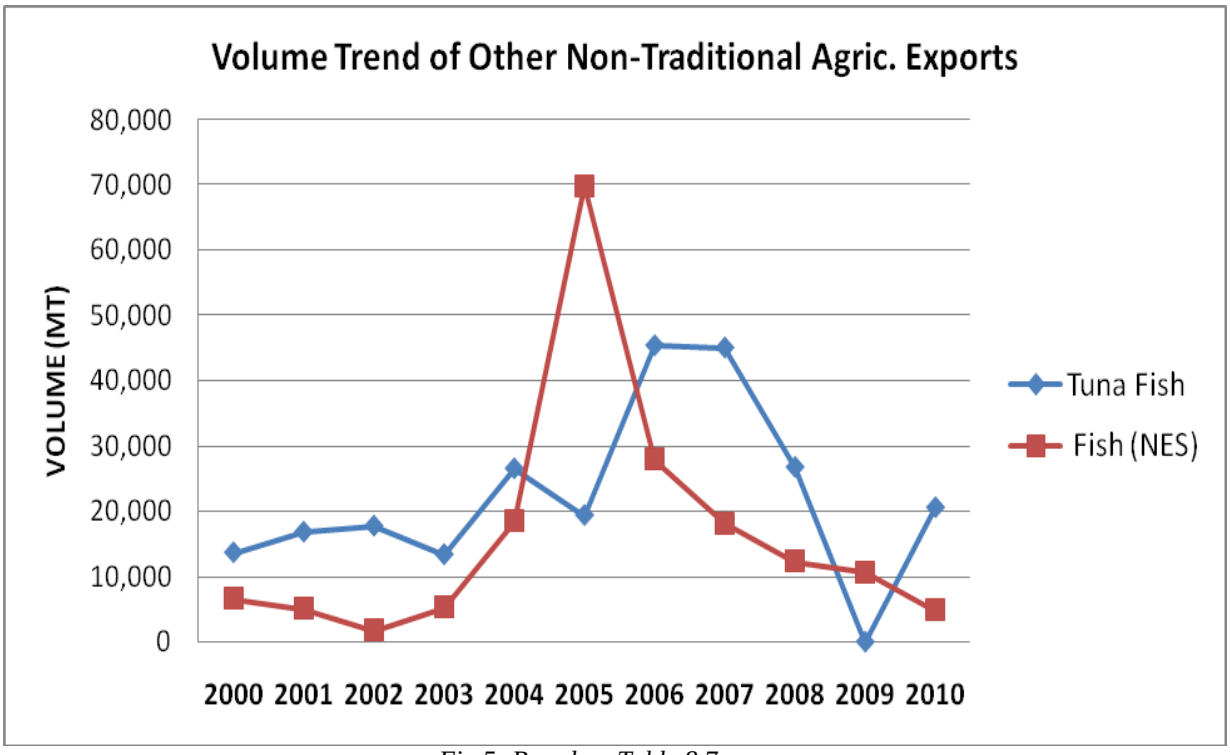


Fig 5: Based on Table 8.7

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

Commodity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	% Change (09-10)
Horticultural:												
Pineapple	11,853	13,450	15,520	14,378	22,069	13,430	19,086	13,475	11,842	10,628	13,555	-10.3
Cotton Seed	855	2,588	363	220	1,965	1,762	3,187	3,010	1,624	1,106	172	-31.9
Kola nut	755	663	1,122	948	1893	125	944	1,296	975	1,463	1,990	50.0
Yam	7,172	4,739	2,428	4,442	8,400	10,951	14,157	14,551	14,889	12,032	12,688	-19.1
Orange (Fresh)	249	126	672	329	94	3,865	462	333	1,647	875	654	-46.9
Vegetables	2,135	3,214	3,333	2,771	423	66	79	49	NA	1,362	2,067	NA
Banana	3,695	3,189	3,250	227	209	489	10,330	9,965	12,717	11,590	15,533	-8.9
Mangoes	118	78	70	108	164	135	83	998	522	235	230	-54.9
Pawpaw	161	993	864	737	1,267	1,081	937	1,020	334	546	971	63.5
Fish & Seafoods:												
Tuna Fish	5,437	10,291	12,191	8,901	23,620	14,978	32,148	52,753	40,666	27,667	37,421	-31.9
Fish (NES)	5,586	8,088	6,205	10,659	21,108	26,386	29,693	27,965	17,350	19,934	9,062	14.9
Lobsters/Shrimps, etc	902	975	1,051	2,612	1,013	843	1,780	2,174	983	49,600	341	-
Processed Tuna	65,101	50,398	71,048	64,051	-	54,850	55,520	-	-	-	-	-
Cuttle Fish/Octopus	3,997	17,973	636	1,378	2,898	2,918	4,124	3,514	1,759	223	836	-87.3
Processed & Industrial:												
Cashew Nuts	2,553	89	1,450	2,599	18,759	5,498	11,975	10,779	20,424	20,154	24,435	-1.3
Cocoa Products		73,754	88,769	138,622	83,579	74,029	152,945	-	-	-	-	-
Raw/Lint Cotton	9,904	8,530	6,143	46,051	3,773	4,053	4,427	2,102	2,560	-	228	-
Robusta Coffee	5,174	2,051	643	365	481	256	133	1,808	-	1,700	1,974	-
Sheanuts	4,674	6,654	6,125	16,746	2,463	28,969	27,249	27,009	24,940	26,853	13,791	7.7

Source: Ghana Export Promotion Council (GEPC), Accra. -Not Available or cannot be estimated.

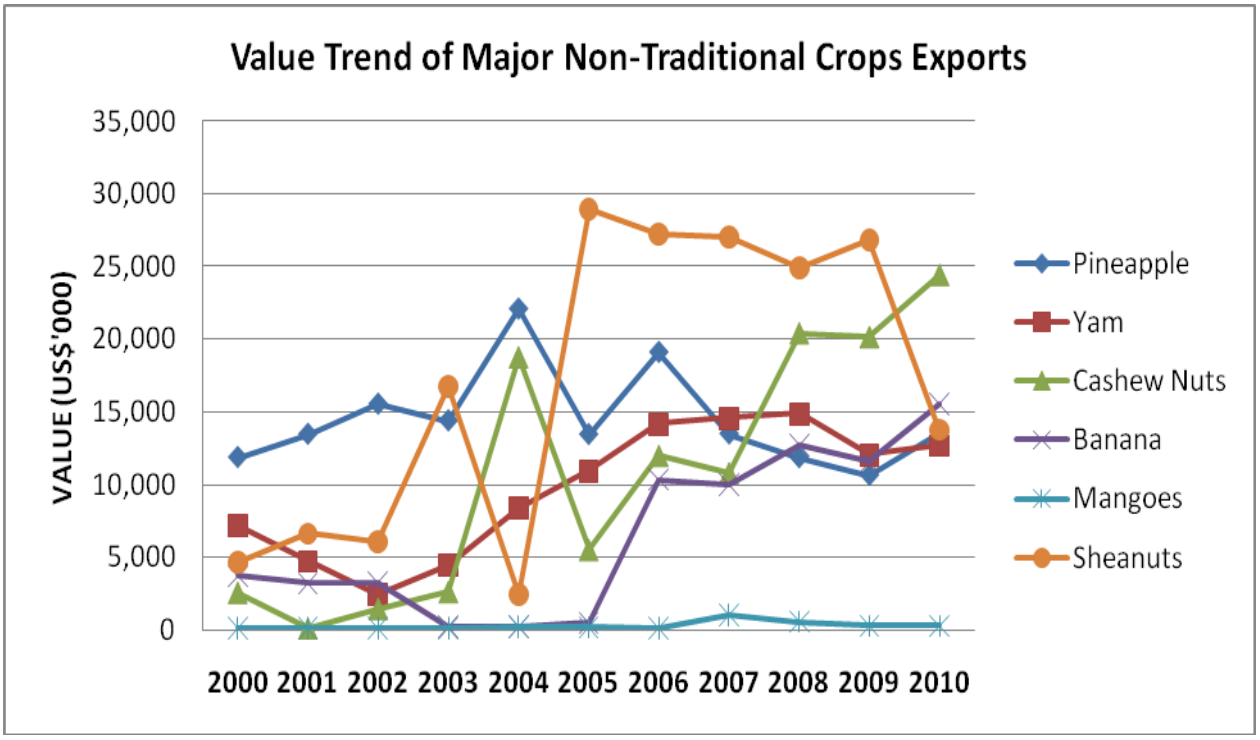


Fig 6: Based on Table 8.8

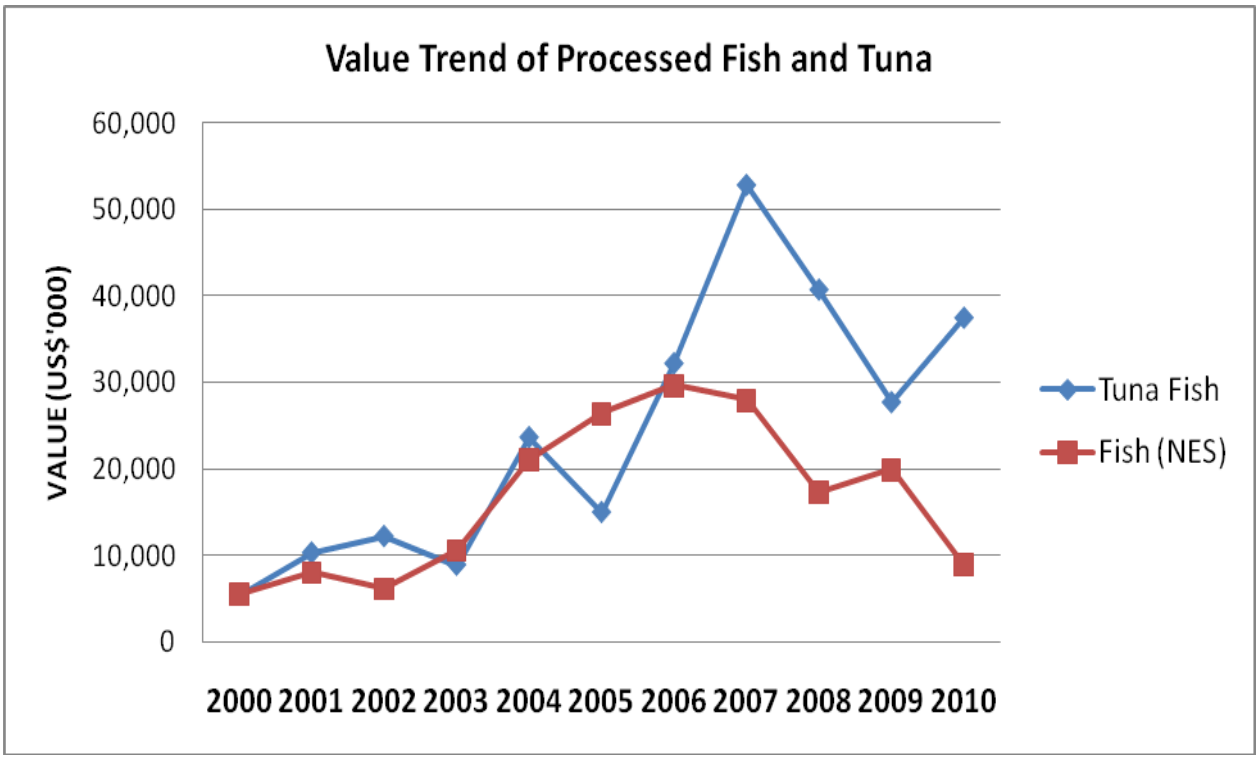


Fig 7: Based on Table 8.8

8.9 **Quantity and Value of Cereal Imports (2000 – 2010)**

Year	Wheat	Rice	Maize	Sorghum
2000 Quantity (Mt)	196,700	187,256	5,050	819
Value $ million	72.03	65.03	0.73	1.18
2001 Quantity (Mt)	168,816	311,513	10,589	4,040
Value $ million	64.25	72.46	1.52	2.75
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	n.a.
Value $ million	99.69	138.94	12.31	n.a.
2006[a] Quantity (Mt)	254,052	389,660	6,572	0.58
Value $ million	46.37	159.47	1.43	n.a.
2007[a] Quantity (Mt)	332,299	442,073	596	n.a.
Value $ million	111.38	157.86	0.21	n.a.
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.

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 value 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, 1997-2010 (Mt)**

Year	NPK	Urea	M. of Potash	SOA*	SSP & TSP*	Nitrate*	Pot. Sulphate	Cocoa Fert.	Others	Total
1997	37,080	1,850	5,450	10,700	0	n.a.	n.a.	n.a.	1,083	56,163
1998	21,858	500	3,095	13,265	500	n.a.	n.a.	n.a.	3,097	42,315
1999	3,602	n.a.	8,066	4,800	3,500	n.a.	n.a.	n.a.	2,025	21,993
2000	14,902	141	4,510	23,165	600	n.a.	n.a.	n.a.	180	43,498
2001	49,287	2,500	4,147	22,628	700	n.a.	n.a.	n.a.	1,586	80,848
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	7,216,079	12,077	52,117	236,547	n.a.	n.a.	130,314	7,689,215

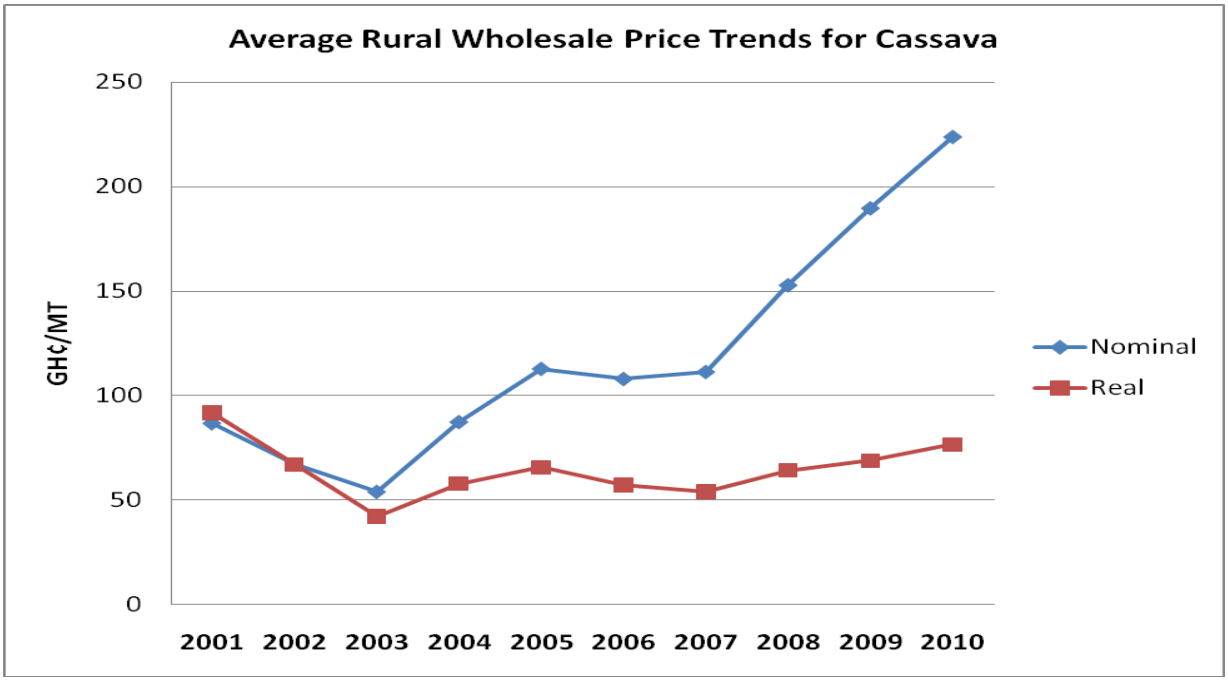
*Source: 1. Ministry of Food and Agriculture, Crops Services Directorate, Accra 2. GSS, Accra(2004-2007). *SSP & TSP are Single and Triple Super Phosphate respectively. SOA is Sulphate of Ammonia. Nitrate fertilizer includes Potassium and Calcium Nitrate. [a] NPK value includes both 15-15-15 and other put together. n.a.= Figures not available.*

8.12 **Agro-chemical Imports (Mt)**

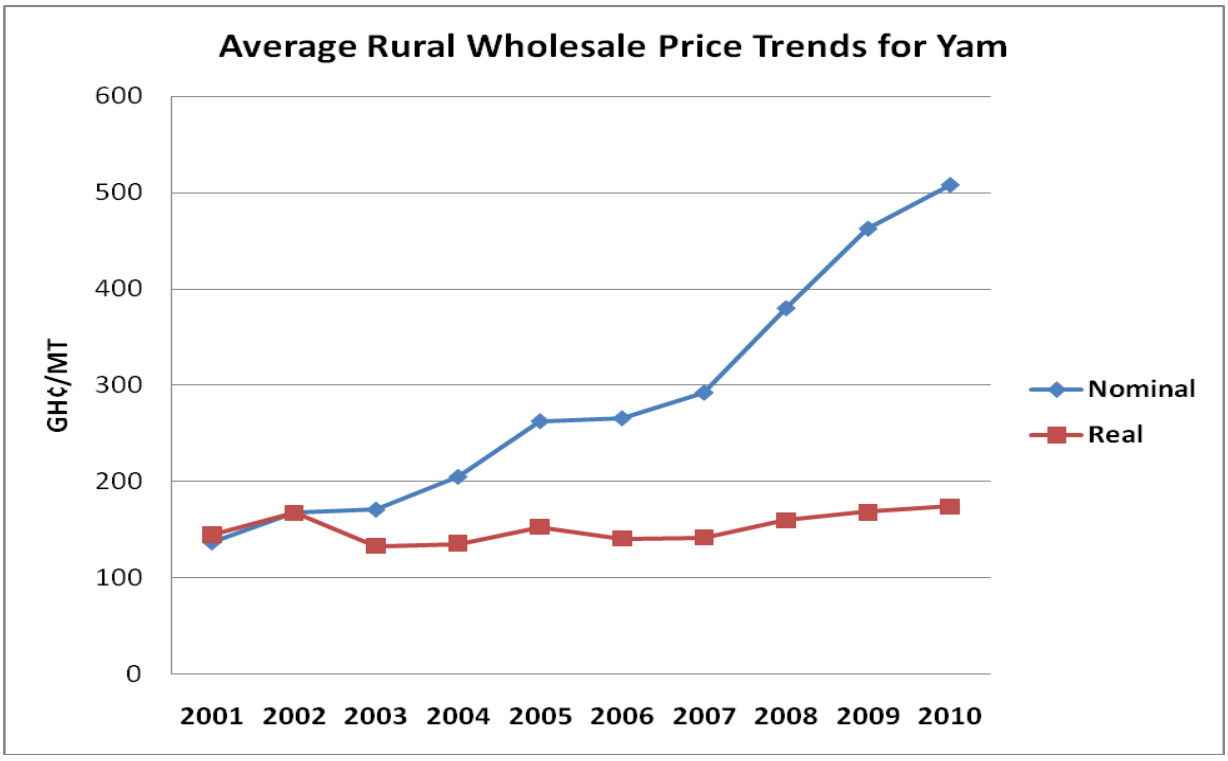
Type of Agro-chemical	Year										
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Insecticide	1,195	907	1,090	5,829	610	5,982	6,921	9,979	5,121	5,078	8,735*
Fungicide	673	618	1,345	1,673	770	1,713	2,148	2,575	2,767	1,248	4,955
Herbicide	224	598	582	2,472	1,096	5,340	8,780	8,932	10,835	4,525	n.a.
Rodenticide	257	384	563	159	n.a.	13	78	123	n.a.	1,187	n.a.
Total	**2,349**	**2,507**	**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.*

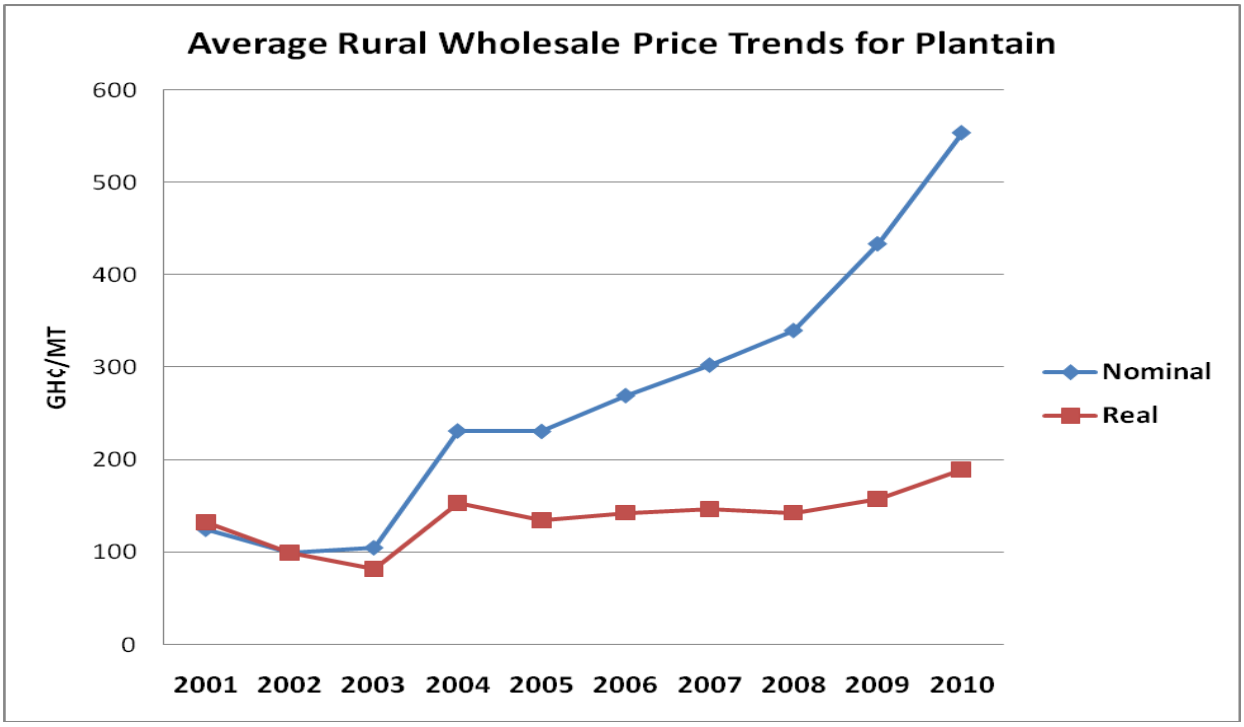
APPENDIX 1



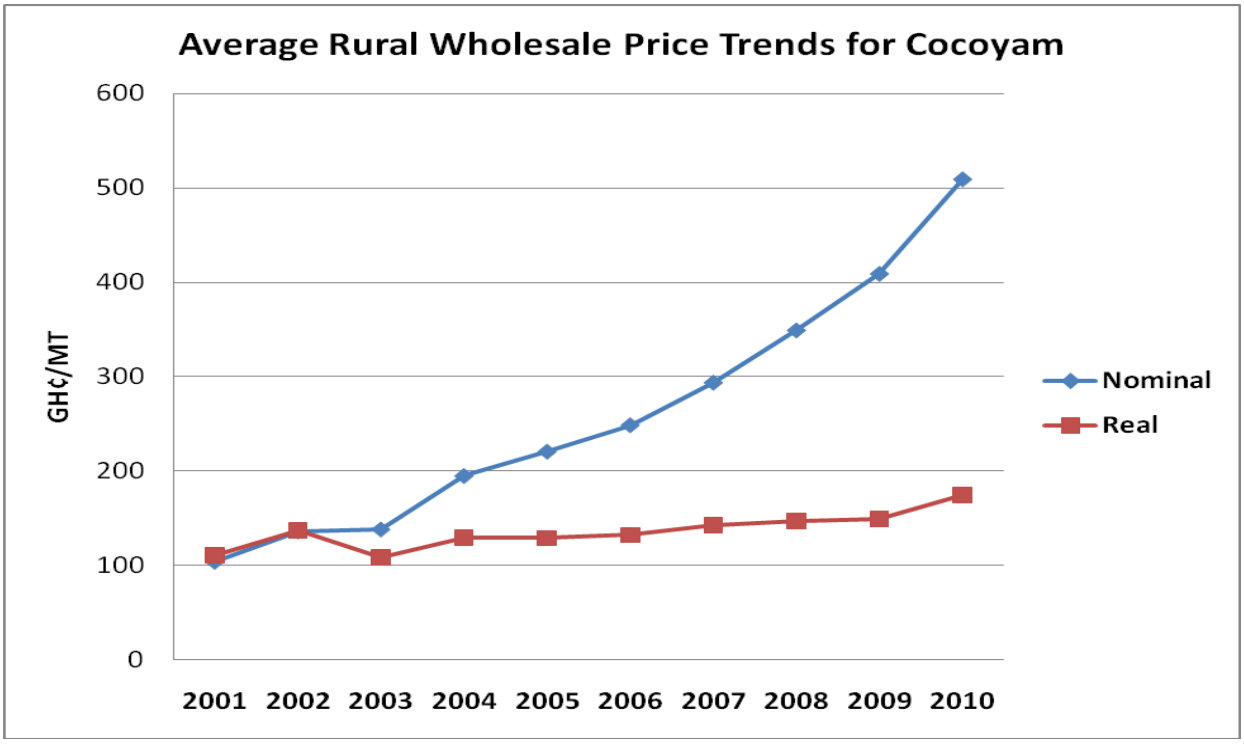
APPENDIX 2



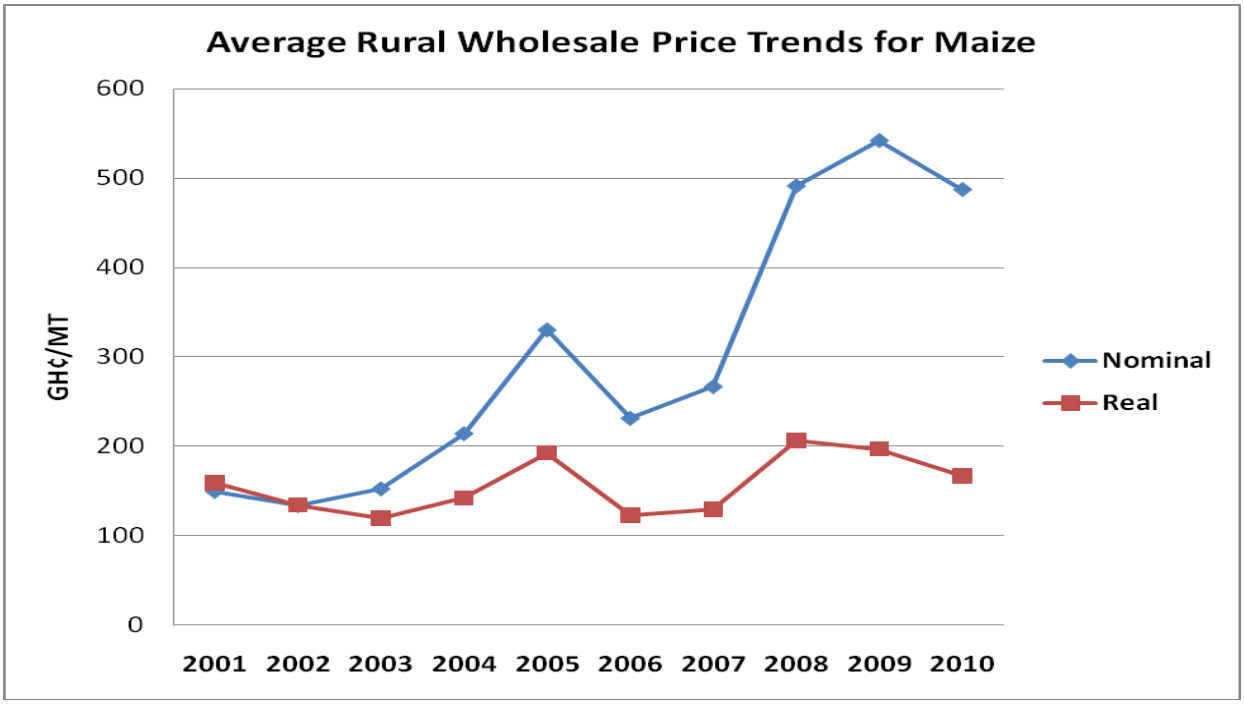
APPENDIX 3



APPENDIX 4



APPENDIX 5



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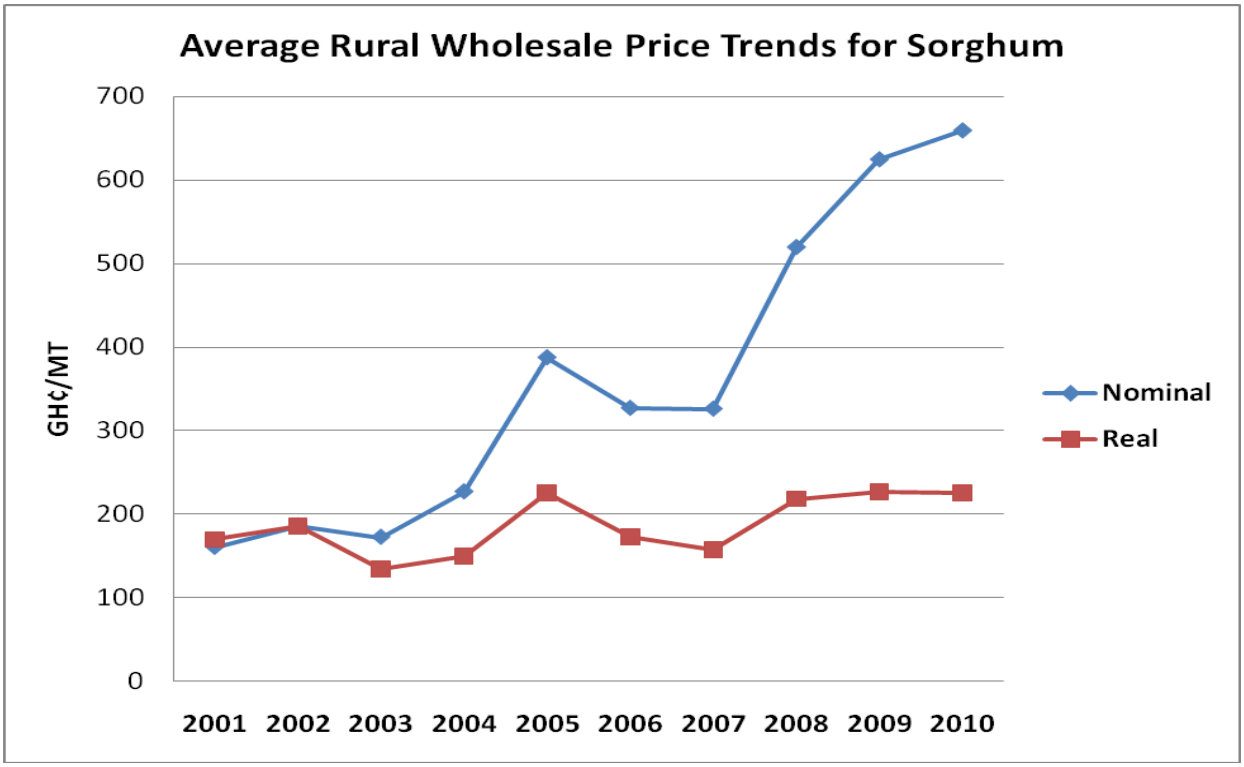
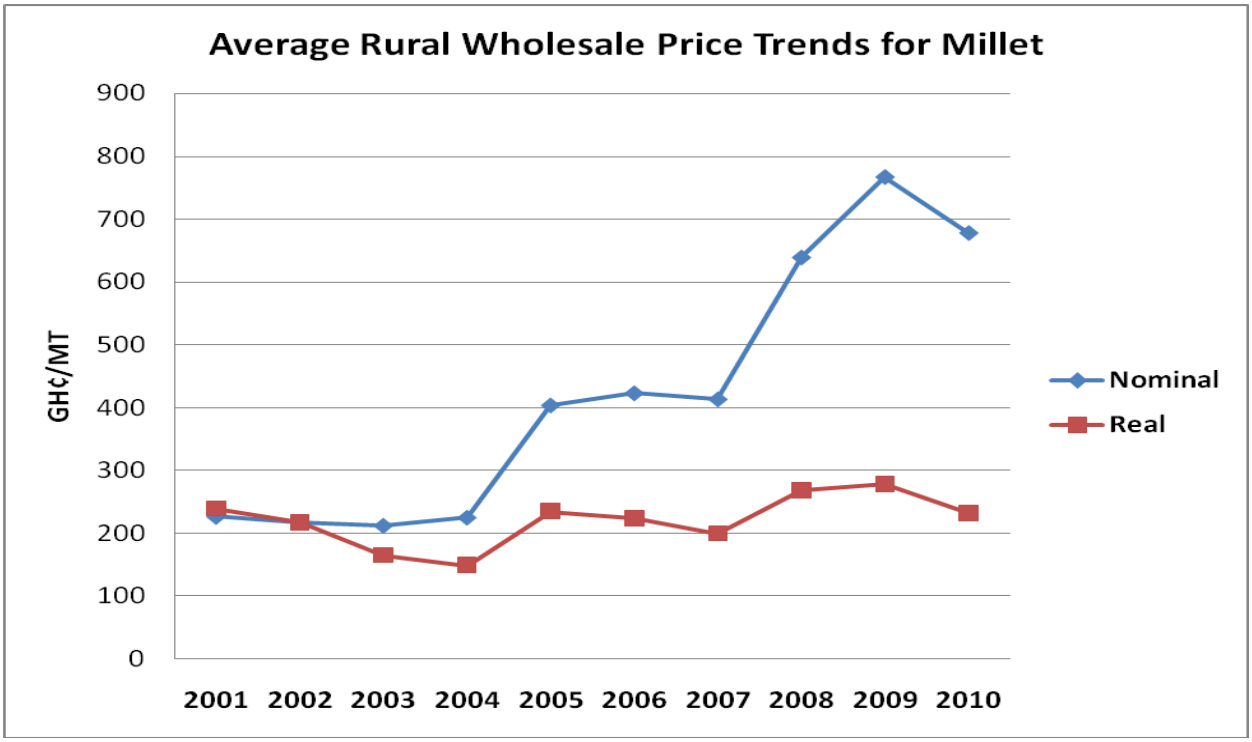
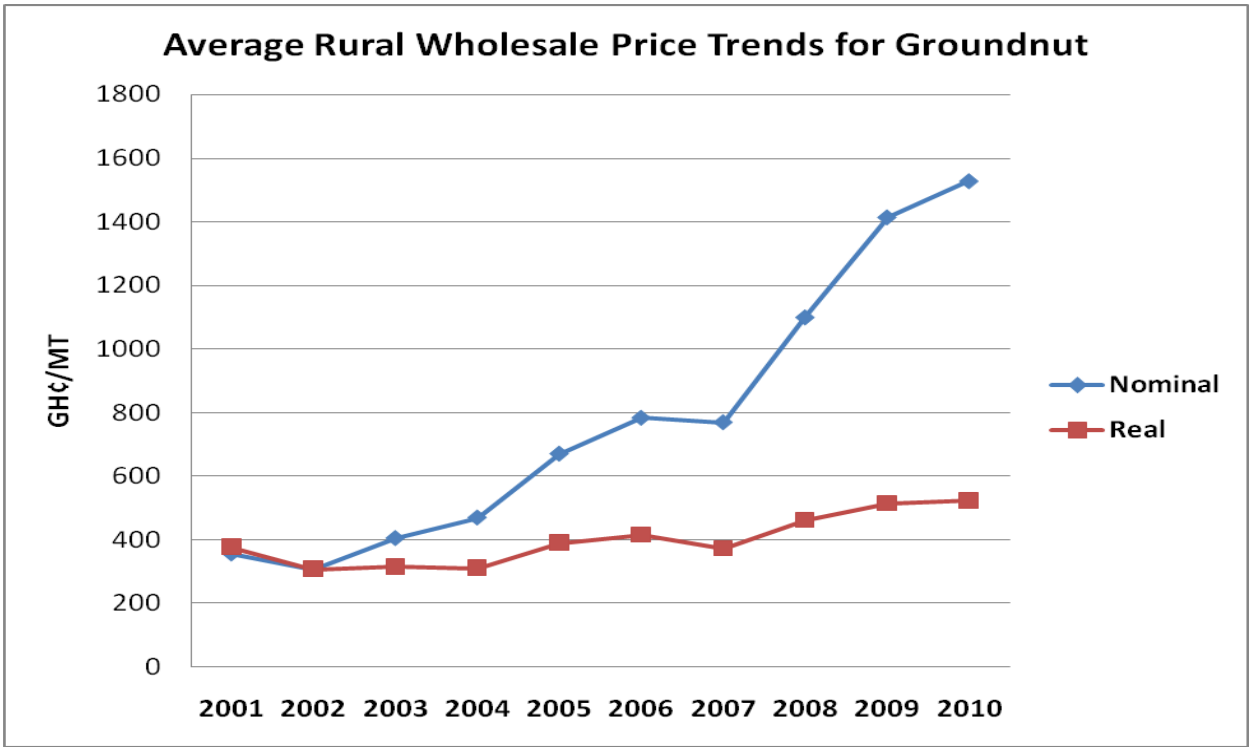


APPENDIX 7



APPENDIX 8



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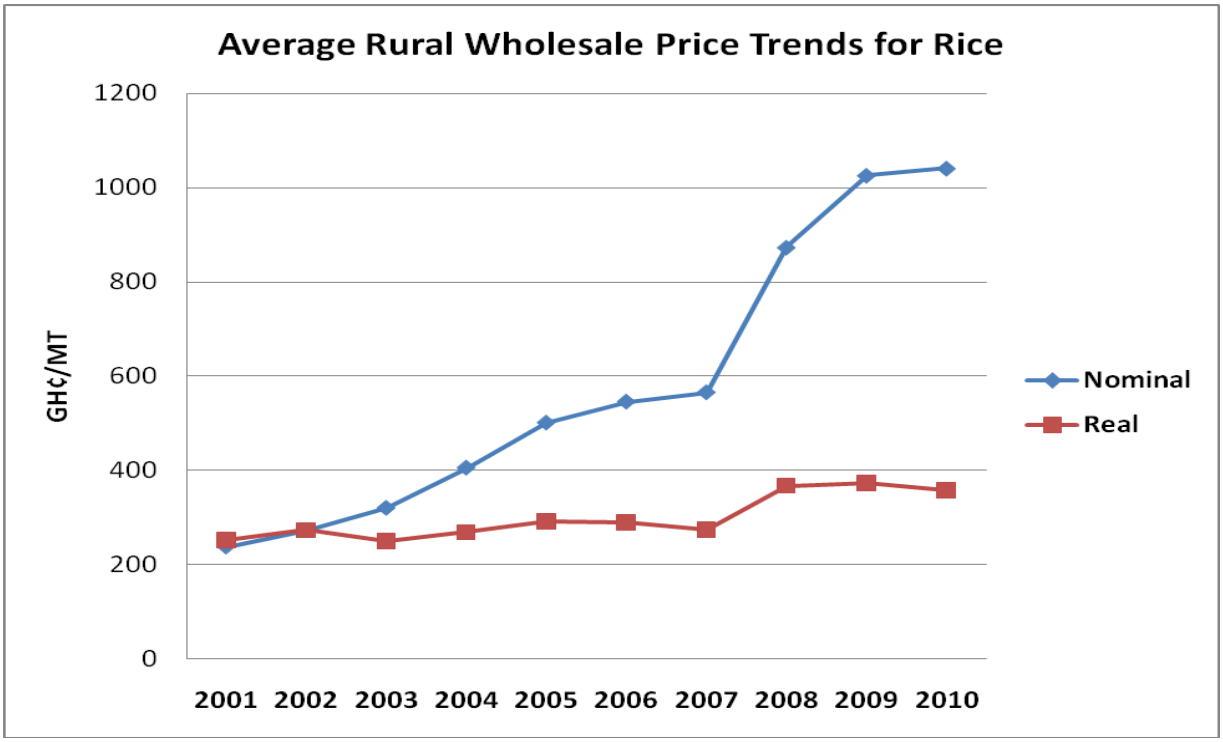

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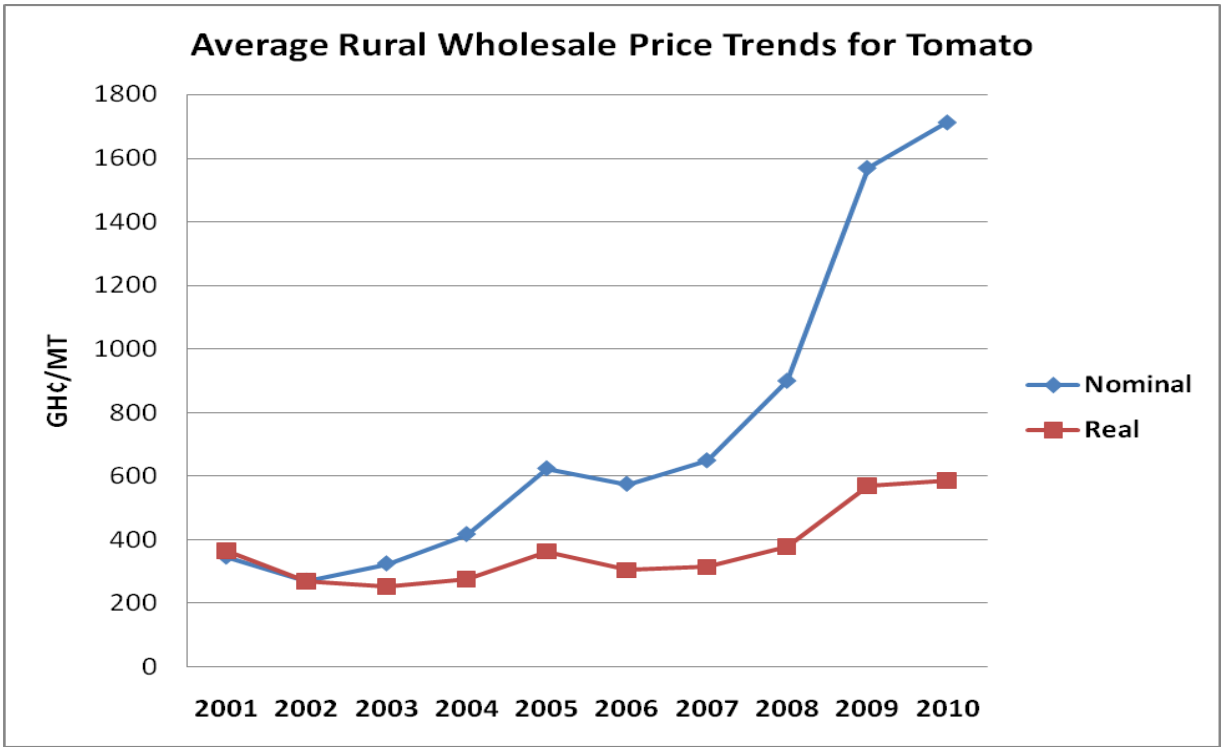
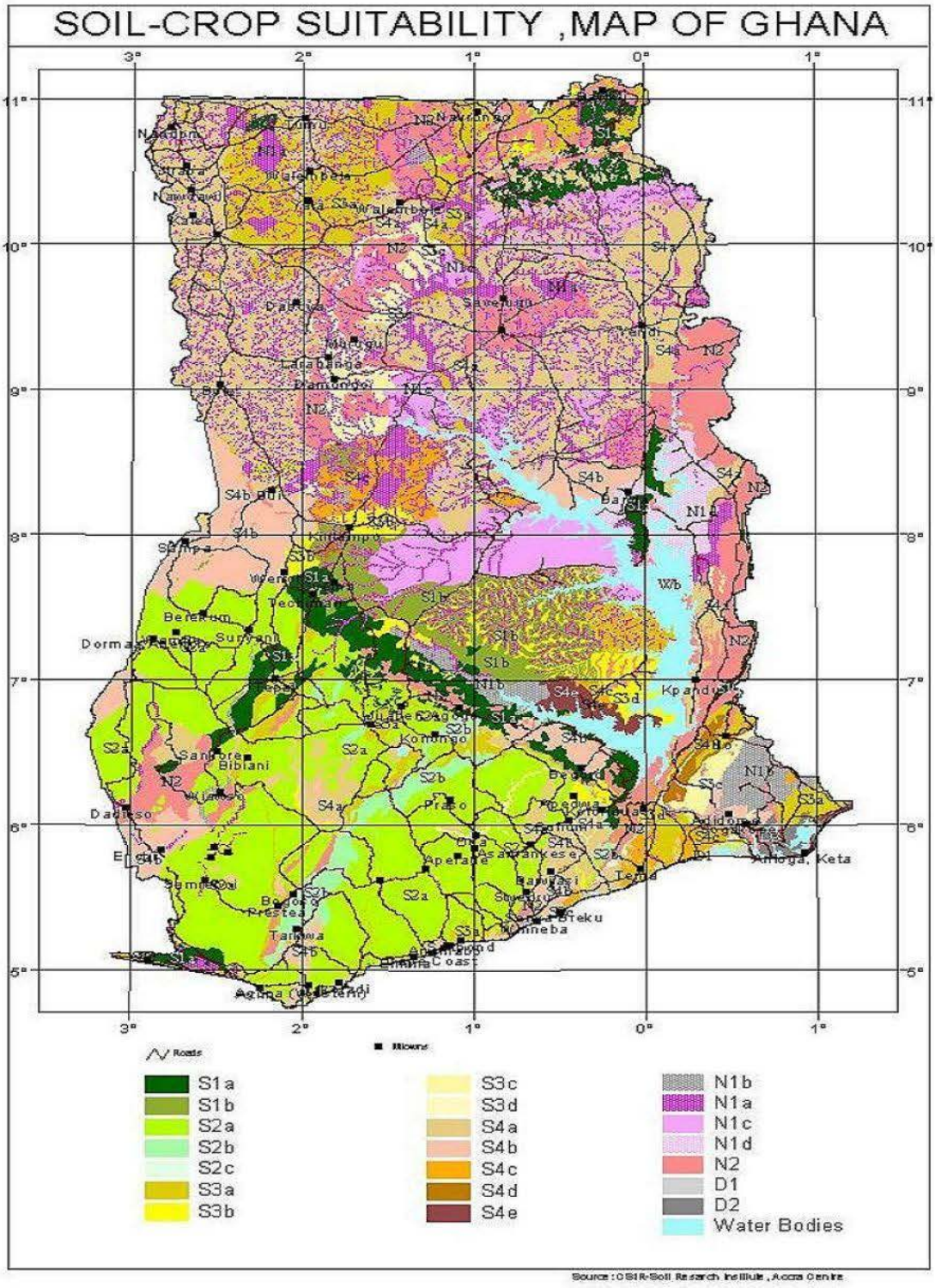


APPENDIX 11


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, 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 drained. 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 Production

Livestock	Off Take Rate (%)	Av. Livestock wt. (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 Livestock Weight (kg) x (Carcass Wt %)/100

APPENDIX 13

PRODUCTION OF SOME MAJOR CROPS IN GHANA: 1991 - 2009
(FIGURES IN '000 MT.)

YEAR / CROP	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maize	730.6	960.9	939.9	1034.2	1007.6	996.0	1015.0	1014.5	1012.7	938.0	1400.0	1289.0	1157.6	1171.4	1,188.8	1219.6	1470.1	1619.6	1871.7
Rice*	131.5	157.4	162.3	221.3	215.7	197.1	281.1	209.8	214.6	253.2	280.0	239.0	241.8	236.5	250.0	185.3	301.9	391.4	491.6
Millet	133.3	198.1	167.8	209.0	193.3	143.5	162.3	159.8	169.4	134.4	159.12	176.0	143.8	154.6	165.0	113.0	193.8	245.5	219.0
Sorghum	258.8	328.3	323.9	360.1	353.4	332.6	355.4	302.0	279.8	279.7	316.1	337.7	287.4	299.0	315.0	154.8	331.0	350.6	353.0
Cassava	5662.0	5972.6	6025.0	6611.4	7111.2	6999.5	7171.5	7845.4	8106.8	8965.8	9731.0	10239.3	9738.2	9567.2	9,638.0	10217.9	11351.1	12230.6	13504.1
Cocoyam	1202.2	1235.5	1147.7	1383.2	1551.8	1529.8	1576.7	1707.4	1625.1	1687.5	1860.0	1804.7	1715.9	1685.8	1,660.0	1690.1	1688.3	1504.0	1354.8
Yam	2331.4	2720.3	1700.1	2125.7	2274.8	2407.9	2702.9	3249.0	3362.9	3546.7	3900.0	3812.8	3892.3	3922.8	4,288.0	4376.0	4894.9	5777.9	5860.5
Plantain	1082.0	1321.5	1474.7	1637.5	1823.4	1818.4	1912.6	2046.2	1932.5	2073.8	2278.8	2328.6	2380.8	2791.6	2,900.0	3233.7	3337.7	3562.5	3537.7
Groundnuts	-	-	-	-	-	-	-	-	208.6	286.8	520.0	439.0	389.6	420.0	520.0	301.8	470.1	485.1	530.9
Coconuts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Oil Palm	-	-	-	-	-	-	-	-	-	-	1612.7	1640.1	1686.8	1712.6	1737.9	1684.5	1896.8	2103.6	2103.6
Beans	-	-	-	-	-	-	-	-	-	62.5	140.0	145.6	141.4	143.8	167.0	118.9	179.9	204.8	219.3

Source: STATISTICS, RESEARCH AND INFORMATION DIRECTORATE (SRID), MIN. OF FOOD AND AGRIC. – 2010.

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APPENDIX 14

AREA OF SOME MAJOR CROPS IN GHANA: 1991 – 2009
(FIGURES IN '000 HA.)

YEAR / CROP	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Maize	606.8	636.7	629.4	688.6	665.0	651.6	696.6	696.9	694.7	713.3	939.6	791.9	732.9	740.0	793.0	790.1	846.3	954.4	991.7
Rice*	79.7	77.2	80.9	99.9	105.3	117.7	130.4	105.3	93.6	88.0	122.8	117.7	119.4	120.0	125.0	108.9	132.8	162.4	162.4
Millet	209.7	203.7	191.2	193.4	189.6	170.0	180.7	186.3	208.3	193.0	198.0	206.6	182.2	185.0	200.0	162.7	182.2	186.7	176.7
Sorghum	307.3	309.6	299.2	334.5	314.3	323.6	332.4	311.7	288.7	329.1	337.2	346.0	298.1	305.0	320.0	208.5	275.9	267.2	252.6
Cassava	551.9	531.8	520.4	551.3	590.7	589.3	629.7	640.3	660.1	726.4	794.4	807.2	783.9	750.0	790.0	800.5	839.9	885.8	875.0
Cocoyam	195.9	173.3	178.8	204.5	213.7	206.2	217.8	372.4	247.5	262.4	282.2	276.7	269.5	255.0	260.0	257.5	251.9	224.6	205.3
Yam	224.1	206.7	154.2	176.1	178.0	187.4	210.9	242.7	261.0	287.4	300.0	321.4	310.9	300.0	325.0	323.6	347.6	378.7	384.9
Plantain	157.1	164.3	183.5	212.5	228.8	224.8	245.9	252.6	244.4	265.1	276.9	286.5	281.2	290.0	299.0	305.3	311.8	324.9	328.0
G'nuts	-	-	-	-	-	-	-	-	217.9	254.5	384.9	464.7	431.7	450.0	480.0	341.6	350.7	336.5	333.4
Coconuts	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Oil Palm	-	-	-	-	-	-	-	-	-	-	285.3	289.2	295.0	299.0	302.9	299.9	337.8	352.8	352.8
Beans	-	-	-	-	-	-	-	-	-	101.5	180.6	190.4	183.4	180.0	185.0	138.8	161.3	162.7	167.0
Tomatoes	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Pepper	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Okro	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
G. Eggs	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-

Source: STATISTICS, RESEARCH AND INFORMATION DIRECTORATE (SRID), MIN OF FOOD AND AGRIC. – 2010

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