



NATIONAL FOREST PLANTATION DEVELOPMENT PROGRAMME



ANNUAL REPORT, 2014

FOREST SERVICES DIVISION - FORESTRY COMMISSION SEPTEMBER, 2015

Cover photos:

Main Photo: EcoPlanet Bamboo LLC nursery at Nkansaso in the Juaso Forest District

Bottom Photos (L): FC/INDUSTRY Fund mixed indigenous species plantation (2010 coupe) within the Pra Anum Forest Reserve in the Oda Forest District

Bottom Photos (M): FC Board members being conducted round the 2004 HIPC plantation, within the Kenikeni Forest Reserve in the Bole Forest District, by the District Manager.

Bottom Photos (R): Teak Seed Production Area within the Tain II Forest Reserve, Sunyani Forest District

EXECUTIVE SUMMARY

The key activities undertaken under the National Forest Plantation Development Programme (NFPDP) during the 2014 plantation year (April, 2014 - March, 2015) are detailed in this report.

The NFPDP attained its 12th year in 2014 in pursuit of its goal of "developing a sustainable resource base that will satisfy the future demand for industrial timber and enhance environmental quality, thereby relieving the pressure on the natural forest and increasing the forest cover".

The main interventions under the NFPDP in 2014 were the establishment and maintenance of forest plantations by the FC/Timber Industry Fund, private commercial developers on-reserve, and under Public Private Partnerships on-reserve; inventory of MTS plantations for thinning purposes; maintenance operations and collection of seeds in 11 Teak Seed Orchards/Seed Production areas.

The NFPDP was expected to deliver the following key outputs for 2014: establishment of 2,900ha of forest plantations on-reserve and maintenance of 21,844.86ha of 2010 - 2013 established plantations; creation of 2,900 jobs and production of 17,757 Metric Tonnes of food crops within the FC 2012 and 2013 plantation coupes; collection of 7.5 Tonnes of Teak seeds from Teak Seed Orchards and Seed Production Areas.

A total of 4,162.07ha was established on-reserve in 2014 under 3 components of the NFPDP. These components comprise the FC/ Timber Industry plantations (487.56ha), Private Commercial Developers on-reserve (1,555.51ha) and Public-Private Partnership plantations (2,119ha). This brings the total area developed by private commercial plantation developers and PPPs within forest reserves to 38,562.65ha.

Additionally, APSD established 4,121ha of Eucalyptus plantations in 2014 with a total area planted to date of 5,684ha in their off-reserve area near Kwame Danso in the Atebubu Forest District.

Two (2) Public Private Partnership (PPP) Land Lease and Benefit Sharing Agreements (LL/BSAs) were signed in 2014 resulting in One Hundred and Twenty-eight (128) LL/BSAs being signed to date. The PPP agreements were signed with EcoPlanet Bamboo LLC and Platinum Plantations Ltd for the establishment of approximately 3,400ha of Bamboo plantations the North Bandai Hills Forest Reserve, Juaso Forest District, and 1,200ha of rubber plantations in the Esen Epam Forest Reserve, Akim Oda Forest District, respectively.

An estimated 2,524 jobs were created in 2014 with respect to the FORM Ghana PPP (913 jobs), Miro Forestry Company (254 jobs), FC-Industry plantations (243 jobs) and APSD (1,106 jobs). Majority of the labour force were sourced from the local communities within the companies' catchment area

An estimated 17,119.72 Metric Tonnes (Mt) of food crops was produced within the 2012 - 2014 plantation coupes (9,475ha) compared to 28,919.88Mt produced last year within the 2011 - 2013 plantation coupes (15,431ha). The major crops produced in the 2012 to 2014 coupes were Plantain - 10,060.19MT, Cereals (maize, millet and rice) - 2,896.59MT, Tubers (Cocoyam, Cassava and Yam) - 2,964.77MT, Legumes (Beans, Cowpea, Groundnut and Sorghum) - 414.75MT and Vegetables (Tomato, Pepper, Garden Eggs) – 783.42MT.

Wildfire reports at the end of March 2015 indicated that 5,025ha of plantations within the 2010 - 2014 coupes were affected by fire during the 2014/2015 fire season (November 2014 – March 2015).

Key challenges to the successful implementation of the NFPDP include the absence of reliable and adequate sources of funding for plantation establishment and maintenance; activities of Fulani herdsmen and cattle, non-availability of contiguous areas of land in the high forest and transition zones for commercial forest plantation developlement and inadequate vehicles/motorbikes for effective monitoring by FSD field staff.

A cross-functional team has been set up to develop proposals for additional and innovative financing options for the establishment and maintenance of forest plantations. Additionally, to reduce the cost burden of the FC with respect to maintenance of existing forest plantations and coppice management of harvested teak stands, there is the need to develop appropriate Public Private Partnership models to attract private investments for these key activities.

The field verification of all reported past plantation establishment achievements of the Modified Taungya System (MTS), Community Forestry Management Project (CFMP) and the Private Commercial Developers on-reserve needs to be undertaken (MTS verification initiated in Offinso Forest District in 2014) together with the finalisation and implementation of the Ghana Forest Plantation Strategy (2015 – 2040).

1.0 INTRODUCTION

The Government of Ghana in 2001 launched the National Forest Plantation Development Programme (NFPDP) which has been implemented to date by the Forestry Commission under various components, based on specific funding sources and implementation strategies.

The goal of the NFPDP is to develop a sustainable resource base that will satisfy the future demand for industrial timber and enhance environmental quality, thereby relieving pressure on the natural forest and increasing forest cover.

The five (5) specific objectives of the NFPDP are to;

- i. restore the forest cover of degraded forest landscapes;
- ii. reduce the wood supply deficit situation in the country;
- iii. generate employment as a means to reduce rural poverty;
- iv. improve environmental quality and provide an opportunity for the country to tap the emerging benefits from the climate change market for carbon sequestration; and
- v. enhance production of food crops thereby contributing to food security in the country

At the end of the 2014 plantation year (April 2014 – March 2015), a total area of 185,088.82ha has been established under the NFPDP as detailed in Table 1 below: Figures 1A and 1B show the trend in Plantation establishment and the relative contribution of the various components under the NFPDP respectively, as at the end of the year 2014.

Table 1: NFPFP Components and achievements from 2002 to 2014

YEAR	MTS	СЕМР	НІРС	PRIVATE COMMERCIAL DEVELOPERS	FSD PLANTATIONS	EXPANDED PROGRAM	FC/ Industry Plantations Fund	TOTAL PLANTED AREA
2002	17,341.00*			1,609.00**				18,950.00
2003	17,541.00*			1,609.00**				19,150.00
2004	16,090.00*		5,509.84	1,609.00**				23,208.84
2005	9,105.00*	1,136.00*	3,341.93	1,609.00**				15,191.93
2006	9,401.00*	2,298.00*	2,708.50	1,609.00**				16,016.50
2007	8,711.00*	2,731.00*	2,947.82	1,613.00**	78.5*			16,081.32
2008	111*	2,930.00*	1,806.67	5,986.65*	160*			10,698.14
2009	2,427.30*	4,293.00*	902.84	3,894.35*	140*			11,361.31
2010				4,612.84*		14,008.84 ¹	106.82	18,432.32
2011				4,439.88*		6719.71 ¹	270.77	11,134.18
2012				3,549.89*		5,854.341	95.3	9,203.35
2013				4,309.51*	2,857.61		180.74	7,347.86
2014				7,795.51*			487.56	8,313.07
TOTAL	80,727.30	13,388.00	17,217.60	44,246.65	3,236.11	26,582.89	1,141.19	185,088.82

^{*}Reported figures, yet to be verified by technical audit

^{**}Achievement of Private Developers for the period 2002-2007 has been estimated based on total establishment collated at the end of 2007, averaged over the period, due to lack of proper documentation on yearly achievements.

¹ Figures reviewed in 2013 following a joint verification of the effective area planted by the Service Companies and the Forest Services Division

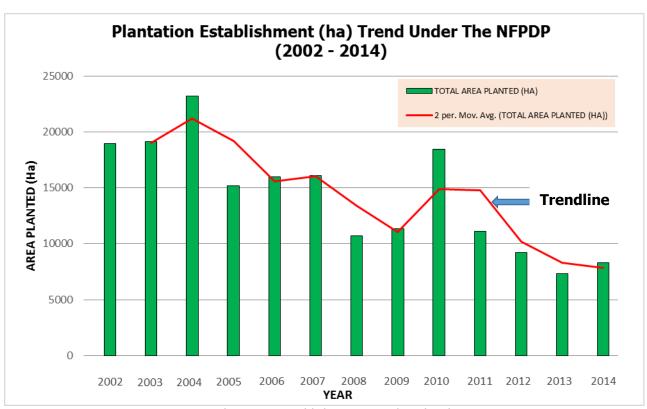


Figure 1A: Forest Plantation Establishment Trend Under the NFPDP

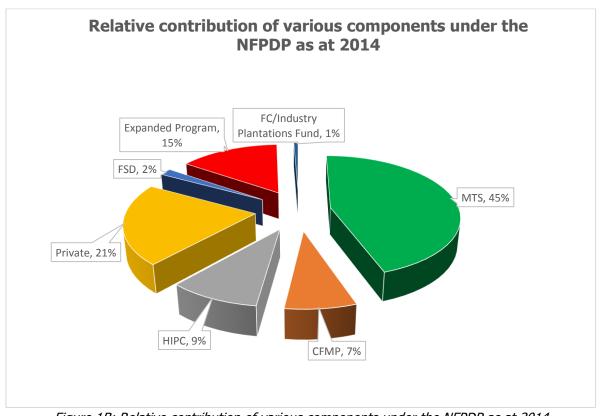


Figure 1B: Relative contribution of various components under the NFPDP as at 2014

1.1 2014 On-reserve targets

On-reserve, the programme was expected to deliver the following key outputs:

- i. 2,000ha of commercial plantations established under a Public Private Partnership (PPP) between the Forestry Commission and FORM Ghana; 500ha by MIRO Forestry Company and 400ha by the FC/Industry Plantations Development Fund.
- ii. Maintenance of 21,665 ha of plantation coupes established from 2010 2013.
- iii. Maintenance of 9 Teak seed orchards/seed production areas within forest reserves
- iv. 2,900 new jobs provided by the 2,900ha to be established by the FC-FORM Ghana PPP, MIRO Forestry Company and FC/Industry plantations.
- v. Production of 17,000 Metric Tonnes of food within 2012 to 2014 FC plantation coupes.
- vi. Collection of 7.5Tonnes of Teak seeds from 11 Seed Orchards and Seed Production Areas



Figure 2: FC/INDUSTRY Fund Mixed indigenous species plantation (2010 coupe) within the Pra Anum Forest Reserve in the Oda Forest District.

1.2 2014 Off-reserve targets

Off-reserve, African Plantations for Sustainable Development (APSD) were expected to establish 4,000ha of Eucalyptus plantations.

2.0 BRIEF DESCRIPTION OF NFPDP COMPONENTS AND ACHIEVEMENTS

Nine (9) components have been implemented to date and brief descriptions of the components and their achievements are provided below.

An area of 4,192.07ha was established in 2014 under 3 components of the NFPDP. These components comprise the, FC/Industry Plantations (487.56ha), Private Commercial Developers on-reserve (3,704.51ha) and Public Private Partnership Plantations (2,119ha).

2.1 The Modified Taungya System (MTS) 2002 - 2009

The MTS involved the establishment of forest plantations by the Forest Services Division (FSD) in partnership with farmers in forest fringe communities.

The FSD provided technical direction, surveyed and demarcated degraded forest reserve lands and supplied pegs and seedlings while the farmers provided all the labour inputs in the form of site preparation, pegging, planting, tending and fire protection.

The farmers were permitted to cultivate their food crops which were inter-planted with the tree crops on the same piece of land. The farmers, in addition to the food crops they harvested, have a 40% share in the Standing Tree Value (STV) of the planted trees. The Government has a 40% share while the landowner and community will have a 15% and 5% share respectively.

The MTS was implemented in degraded forest reserves in the High Forest Zone of Ghana. 80,727.30ha was reported planted and an area of 1,376.393ha (2002 – 2005 coupes) was verified in 2014 by the Offinso Forest District in the Afram Headwaters, Asufu East, Afrensu Brohuma, Asubima, Opro and Mankrang forest reserves. The verification of the MTS stands shall continue in 2015.

Inventories for thinning were undertaken in 14 MTS Teak plantations (2002 - 2004 coupes), producing a commercial volume of 16,836.959m³ of Teak wood. These inventories were undertaken in the Brong Ahafo and Ashanti Regions. The total area of the plantations inventoried was 918.42ha (Brong Ahafo - 337.738ha; Ashanti - 580.682ha). Details of the inventories undertaken are shown in Tables 2 and 3 below:

Table 2: Summary of MTS inventories undertaken in the Offinso Forest District, Ashanti Region

Forest District	Forest Reserve	Compartment	Year of Est.	Species	Extent (Ha)	No. of commercial stems	Total Vol. (UB) (m³)
		31	2002	Teak	127.2	5,823	1,041.12
	Mankrang	31	2003	Teak	137.3	2,605	443.577
	River	34	2002	Teak	106.0	14,467	3,003.75
Offinso		44	2002-2004	Teak	118.1	7,899	1,420.27
	Mankrang River	45	2002	Teak	179.7	15,004	3,148.31
	Afrensu		2002	Teak	10.8	1,637	229.409
	Brohuma	38	2002	Teak	28.9	2,924	459.062
Subtotal		5			580.682	50,359	9,745.495

Table 3: Summary of MTS inventories undertaken in the Sunyani Forest District, Brong Ahafo Region

Forest District	Forest Reserve	Compt. /Series	Year of Est.	Species	Extent (Ha)	No. of commercial stems	Total Vol. (UB) (m ³)
Sunyani	Tain II	94	2002	Teak	94.62	4,597	965.81
Sunyani	Tain II	95	2002	Teak	81.54	2,318	512.279
Sunyani	Tain II	259	2002	Teak	12.42	9,840	1,970.22
Sunyani	Tain II	304	2002	Teak	49.44	7,134	1,394.49
Sunyani	Tain II	93	2002	Teak	13.81	1,742	370.508
Sunyani	Tain II	235	2002	Teak	18.85	2,620	540.45
Sunyani	Pamu Berekum	Asunsu No. 1	2001	Teak	13.66	1,176	260.625
Sunyani	Tain II	317	2002	Teak	53.40	5,552	1,077.09
Subtotal		8			337.738	34,979	7,091.464

Two Modified Taungya Groups received their 40% share of harvested material from thinning exercises undertaken. These are the Ayigbe Taungya Farmers Association (GH¢109,576.80) and the Dumasua Taungya Group (GH¢115,083.44) who received the proceeds from Compartment 45 (Lot C) of the Yaya Forest Reserve; and Compartment 302 and 303 of the Tain II forest Reserve, respectively, all within the Sunyani Forest District.

2.2 Government Plantation Development Programme (GPDP/HIPC) 2004 - 2009

The Government Plantations Development Project (GPDP) utilized hired labour and contract supervisors to establish forest plantations. Plantation workers were hired and paid a monthly allowance to establish and maintain the plantations while plantation supervisors were engaged on contract basis to supervise and offer technical direction at the site level.

The FSD exercised general oversight and monitored field activities to ensure compliance with quality standards for plantation establishment. This strategy was funded through the Highly Indebted Poor Countries (HIPC) benefits. Under the scheme, plantations developed are owned by government and the respective landowners who are entitled to royalty payments.

The GPDP was implemented in degraded forest reserves across Ghana. 17,217.60ha was established, however, maintenance has not been carried out within the stands as expected due to the lack of funds. Figure 2 shows a HIPC stand in the Bole Forest District that was inspected by the FC Board.



Figure 3: FC Board members being conducted round the 2004 HIPC plantation within the Kenikeni Forest Reserve in the Bole Forest District by the District Manager.

2.3 Community Forestry Management Project (CFMP): 2005 - 2009

The Community Forestry Management Project (CFMP) was funded with a loan from the African Development Bank (AfDB) and adopted the MTS model for the establishment of forest plantations.

13,388ha was reported established within degraded forest reserves in the Brong Ahafo (Sunyani Forest District), Ashanti (Offinso Forest District) and Eastern Region (Begoro and Akim Oda Forest Districts) of Ghana.

2.4 Model Plantation component: 2007 - 2009

In 2007 the Model Plantation component, a purely research based scheme was introduced to offer the FC plantation managers the opportunity to undertake mixed species trials and experiment with various planting designs and tree spacing. Tree spacing so far tried include 3m x 3m, 3m x 2m and 2.5m x 2.5m. Mixed exotic-indigenous species planting designs implemented include MS 3-12, MS 4-8, and MS 3-6-12.

378.5ha of model plantations was reported established within the High Forest and Transitional Zones of Ghana in degraded forest reserves between 2007 and 2009.

2.5 Expanded Plantation Program (EPP) 2010 - 2012

The National Forest Plantation Development Programme (NFPDP) was expanded to include private lands located outside forest reserves under the Expanded Plantation Program (EPP). The EPP ensured that most of the Metropolitan/Municipal/District Assemblies without degraded forest reserves also benefited from the job opportunities being created through the NFPDP.

Under the Expanded Plantation Program, private companies were contracted to undertake the establishment and maintenance of plantations and the supply of seedlings. Messrs Zoil Services Ltd and Ecotech Services Ltd undertook the establishment and maintenance whilst Messrs African Foresters Brigade supplied the seedlings. The Forestry Commission played a monitoring and reporting role under this program. The successful stands (31% and above seedling survival percentage) handed over to the Forestry Commission in 2013 have also not been tended since they were handed over.



Figure 4: EPP 2010 Tolon neem woodlot site (Off-reserve) established by Ecotech Services Limited in the Tamale Forest District

A total of 26,582.89ha (12,318.51ha (46.3%) on-reserve and 14,264.38ha (53.6%) off-reserve) was verified as planted over the three years of implementation.

The effective area planted was jointly verified by the Forestry Commission and the Service Companies. 18,987.55ha (71.5%) had survival percentage of 31% and above and were handed over to the Forestry Commission. 49% of the area handed over were within forest reserves while the remaining area (50.21%) handed over were in off-reserve areas.

7,595.34ha (37.65% on-reserve and 62.35% off-reserve) of the areas planted by the Service Companies had survival percentage of 30% and below, and therefore classified as failed. Some of these failed areas were rehabilitated in 2014 by the Service Companies at their own cost.

Financial Bonds covering the cost of the rehabilitation have been deposited with the Forestry Commission by the two Service Companies.

The replanted areas would be handed over to the Forestry Commission when joint survival surveys indicate satisfactory survival percentages (75% for the savannah zones and 80% for the High Forest and Transition Zones).

Zoil Services Ltd was allocated a replacement area on-reserve of 4,870ha out of their area of 5,230.16ha to be rehabilitated, for the establishment of new plantations due to the difficulties encountered in the off-reserve failed areas. In 2014, 21.18ha of new plantations was verified as planted without achieving the required percentage success. In the existing failed areas being rehabilitated in 2014 (360.16ha) the required percentage success was also not achieved.

Ecotech Services Ltd was allocated a replacement area of 2,004ha on-reserve, out of their area of 2,365.18ha to be rehabilitated, for the establishment of new plantations. 733ha of new plantations was verified as planted and 57.71ha achieved the required percentage success.

2.6 FC/Timber Industry Plantation Development Fund Plantations 2010 - 2014

The Forestry Commission – Timber Industry Plantation Development Fund Committee (FC/Timber Industry Fund Committee) tasked the Forestry Research Institute of Ghana (FORIG) to establish Best Practice forest plantations of fast growing indigenous and exotic commercial timber species with funding from the FC/Timber Industry Fund.

FORIG has accordingly been establishing forest plantations on behalf of the FC/Timber Industry Fund Committee since 2010. These plantations have been established in the Eastern and Ashanti Regions, within selected degraded forest reserves.



Figure 5: FC/INDUSTRY Fund Mixed indigenous species plantation 2010 coupe (within the Ceiba stand) in the Pra Anum Forest Reserve in the Oda Forest District.

In 2014, an area of 487.56ha was confirmed planted with the total area planted to date being 1,141ha as summarised below in Table 4.

Table 4: Summary of FC/Industry Plantations established to date

Region	Forest	Forest Reserve	Compartment	Verified Area
	District		/Site	Planted (ha)
Eastern		Esen Epam	3	82.58
			17	116.717
	Oda		20	53.014
			26	23.972
		Pra Anum	Afiantianga/Nkansaso No.1	3.4307
			Afiantianga/Nkansaso No.2	10.956
			Charlewote	81.759
			Awanwinso	45.772
			Mronam	29.799
Ashanti	Nkawie	Asenanyo	27	38.2
			150	35.8
			151	70.67
		Opro River	2	46.1
	Offinso		99	54.2
		Mankrang River	30	48.2
			38	14.46
			40	28.06
			41	124
			42	105.9
			43	14.8
			45	8.93
			46	26.63
		Afram Headwaters	9	77.26
Total				1,141

The establishment details are presented in Appendix I.

2.7 Private Commercial Forest Plantation Development

Hitherto government has been the dominant player in forest plantation development in the country. However, since the implementation of the NFPDP in 2002, private sector contributions have been growing steadily. During the year under review, out of a total establishment of 8,313.07ha, the private sector contributed 7,795.51ha (representing 93.8%).

Five (5) private companies have contributed 46% of the total area planted by private commercial developers under the NFPDP as at the end of 2014. These comprise FORM Ghana (6,313ha), MIRO Forestry Ghana (1,163ha), Mere Plantations Limited (1,172ha), African Plantations for Sustainable Development (APSD) (5,684ha), and Ayum/Greenfields (6,032ha). Figure 6 shows the locations of the plantation sites of the five companies.

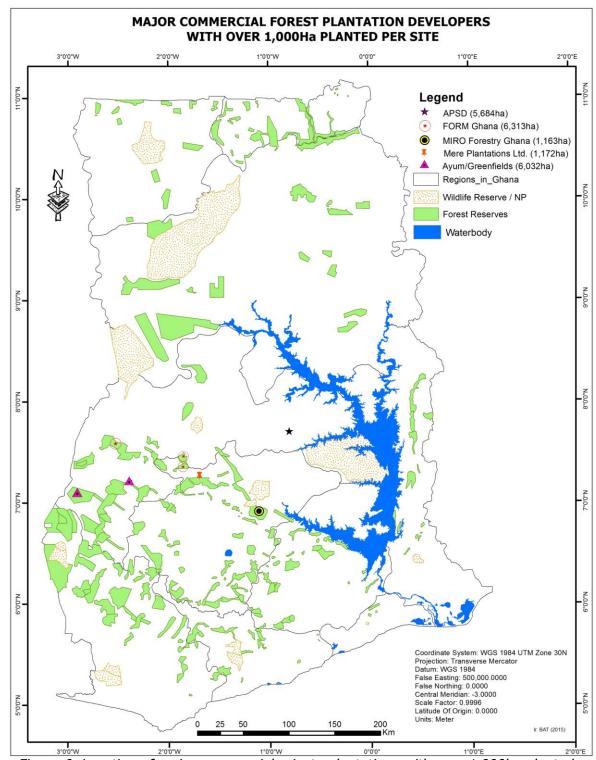


Figure 6: Location of major commercial private plantations with over 1,000ha planted

2.7.1 Private Commercial Plantation Developers On-Reserve: 2002 - 2014

The Private Commercial Plantation Developers On-reserve component involves the release of degraded forest reserve lands by the FC to private entities after vetting and endorsing their reforestation/ business plans; and signing of Land Lease/Benefit Sharing Agreements (LL/BSAs). The operations of these private developers are then monitored through periodic field visits by the FSD to ensure compliance with the terms and conditions of the approved reforestation plans. The private investor earns 90% of the total proceeds from the plantation while the FC, Landowner and Community earn 2%, 6% and 2% respectively. The investor additionally pays ground rent of the Ghana Cedi equivalent of \$2/ha/year throughout the life of the investment.

8,478.49ha of degraded forest reserve lands (66 compartments) was allocated to 17 private commercial developers in 2014. This brings the total number of private developers that have been granted permits to undertake commercial plantation development within degraded forest reserves to Three Hundred and thirty-one (331) with a total allocated area of 139,338.67ha in 51 forest reserves.

3,704.51ha was planted by 50 commercial developers on-reserve in 2014. This brings the total area reported developed by commercial plantation developers within forest reserves to 38,562.65ha. This figure is yet to be verified through a technical audit. Details of commercial forest plantation developers within degraded forest reserves can be found in Appendix II.

Nineteen (19) compartments were retrieved from five (5) non-performing plantation developers in 2014. The exercise to retrieve compartments from non-performing plantation developers will be pursued in earnest in 2015.

An amount of Gh¢326,427.72 was generated as ground rent payments in 2014.

2.7.2 Public Private Partnership (PPP)

2.7.2.1 FORM Ghana Ltd

In May, 2013 the FC signed a Public Private Partnership (PPP) agreement with FORM Ghana to jointly undertake a commercial plantation covering 14,596ha within Tain II forest reserve in the Sunyani Forest District. The project is estimated to cost US\$50.3 million to implement. The planting target for 2014 was 2000ha and 2,119ha was reported planted. This comprised 1,924ha of Teak and 195ha of a mixture of indigenous species (Ofram, Mahogany, Albizia, Potrodom and Kola)

Within the partnership, FORM Ghana is entitled to 80% of the plantation proceeds and benefits with the Forestry Commission, Landowners and Forest fringe communities entitled to the remaining 20%. FORM Ghana also pays ground rent of the Ghana Cedis equivalent of \$2/ha/yr to the landowner together with a facilitation fee of \$2/ha/yr for the customary and conflict resolution role expected of the traditional authorities. The FC undertakes survey and demarcation and fire education within fringe communities at its own cost as part of its contribution to the project.

The PPP to date has employed 213 permanent employees and 700 temporary labourers so far under this project. Most of the recruited staff were from the forest fringe communities. The temporary workers were recruited for weeding, land preparation and planting of the project area. The number of permanent workers will increase as more hectares per year are planted.

2.7.2.2 ECOPLANET BAMBOO GROUP

EcoPlanet Bamboo Group is a US based company with bamboo plantation operations currently in Nicaragua and South Africa, with expansion into Southeast Asia underway. The company is the first globally to develop commercial plantations of clumping bamboo, as well as develop associated technology and market demand for this fiber to be accepted as an alternative to the harvesting of natural forests for industries that currently rely on timber.

In November 2014 the FC signed a PPP agreement with the company for the development of a 3,340ha commercial bamboo plantation in the North Bandai Forest Reserve, Juaso Forest District, Ashanti Region.

Bamboo's ecological status is a grass, yet its fiber represents a timber. Its industrialization as a forest plantation species has numerous advantages over traditional tree species:

- 1. Faster period to maturity; bamboo reaches maturity around year 7.
- 2. Annual harvesting; A portion of each plant will be harvested each year, enabling continuous annual harvesting.
- 3. No replanting required; cutting select culms within each plant stimulates further growth,
- 4. Greater annual yields.

These traits make bamboo a much higher yielding species with regards to raw fiber per hectare than traditional tree species.

EPB intends to grow species within 2 genera - *Bambusa* and *Dendrocalamus*. All species selected are clumping (sympodial) bamboos, meaning that they grow within a central root system, that does not continue to extend laterally. Species have been selected to ensure the following:

- 1. Climatic suitability
- 2. High yields
- 3. Availability of planting material

EPBG will also grow *Oxytenanthera abyssinica* within areas set aside for conservation purposes and the regeneration of native species. This species is native to Ghana and is found growing wild in close proximity to the North Bandai Hills Forest Reserve.

During the period under review EPBG initiated nursery operations with a predominantly female workforce of about 250 drawn mainly from Nkansaso, Mankala and Sempoa (Figures 7 and 8).



Figure 7: A section of EPBG nursery workers (Nkansaso near North Bandai Hills Forest Reserve)



Figure 8: EPBG bamboo nursery, Nkansaso

2.8 Private Commercial Forest Plantations Off-Reserve

2.8.1 African Plantations For Sustainable Development (APSD)

African Plantations for Sustainable Development (APSD) Ghana Limited is a privately owned company engaged in the establishment of fast growing plantations for bio-energy production in the Atebubu and Sene Districts of the Brong Ahafo Region.

The company operates a mechanised state of the art forest tree nursery with an installed capacity of 25 million seedlings annually. The company has so far invested about US\$35 million in infrastructure, equipment and plantation development in Ghana.

APSD Ghana Limited has acquired an off-reserve concession with an estimated area of 86,000ha. An estimated 25% of this concession has been taken out of production and is being managed as a biodiversity conservation area. The company has so far established 5,684ha of Eucalyptus and Acacia plantations and employs a labour force of 1,106 predominantly sourced from the local communities within the company's catchment area. In 2014, the company established 4,121ha of plantations.

The company aims to establish efficient electrical power production based on fast growing Eucalyptus and Acacia plantations. APSD plans to plant approximately 20,000ha of these trees species to feed two 30 MWe power plants based on three to five year tree rotations.

2.8.2 Newmont Golden Ridge Ltd

Newmont Golden Ridge Ltd (NGRL), as part of its Environmental Impact Statement (EIS) is obligated to undertake a 303ha reforestation project to mitigate the effects of mining in its 101ha mining lease area within a portion of the Ajenjua Bepo Forest Reserve, Kade Forest District, granted in 2010.

The company established 60ha of mixed species plantations in 2014 on acquired private lands flanking the Mamang River Forest Reserve, along FRBP 21 to FRBP 25 (Figure 9). To complete its obligation the company has been allocated 257ha of degraded forest land within the Kwekaru Forest Reserve, also in Kade Forest District by the FC, to carry out a reforestation project. The entire area established, both on and off-reserve, will be handed over to the FC after 10 years of establishment and maintenance.



Figure 9: NGRL reforestation offset area near New Abirem, Kade Forest District.



Figure 10: Indigenous timber species nursery established by Newmont Golden Ridge Ltd

3.0 MANAGEMENT OF TEAK SEED ORCHARDS/SEED PRODUCTION AREAS



The Forest Services Division in January 2014 designated five (5) selected Teak seed stands in the Jasikan and Sunyani Forest Districts as Seed Production Areas (SPAs) to complement the existing six (6) Seed Orchards (SOs) for the collection of Teak seeds with superior genetic qualities (Figures 11, 12, 11 and 12). The locations of the Teak SPAs/SOs are indicated in Tables 6 and 7 below.

During the period under review stand maintenance and seed collection were undertaken within the 11 Seed Orchards (SOs) and Seed Production Areas (SPAs). The activities that were undertaken include weeding, removal of debris from the stands, seed collection, dehusking and bagging of the teak seeds.

Figure 11: An 18-year old plus tree within the Kihuhwi Teak provenance Seed Orchard, Bia Tano Forest Reserve, Goaso Forest District.



Figure 12: Kihuhwi Teak Seed Orchard within the Bonsa River Forest Reserve, Tarkwa Forest District



Figure 13: Plus Tree within Kihuhwi Teak Seed Orchard within the Bonsa River Forest Reserve, Tarkwa Forest District

Table 5: Teak Seed Orchards

Region	Forest District	Forest Reserve	Compt./Series	Extent (ha)
Eastern	Kade	Ajenjua Bepo	20	4.06
Central	Dunkwa	Oppon Mansi	30	4.086
Brong Ahafo	Goaso	Bia Tano	8	8.07
	Sunyani	Tain II	242	3
Ashanti	Nkawie	Asenayo	123	3.38
Western	Tarkwa	Bonsa River	34	3.71
	Sub total			26.306

Table 6: Teak Seed Production Areas

Region	Forest District	Forest Reserve	Compt./Series	Extent (Ha)
Volta	Jasikan	Apepesu River	Pampawie	17.21
		Kabo River	Worawora	24.1
		Odomi	Teteman	3
Brong Ahafo	Sunyani	Tain II	297	19.12
			301	16.68
	Sub total			80.11
TOTAL				106.416

It was expected that an average of 70 kilos of seed would be collected per ha from the stands producing 7,449.12kg of Teak seeds however, only 2,714kgs were collected as indicated in Table 7 below due to late collection and excessive canopy competition leading to relatively small tree canopies with the resultant lower seed production.

Table 7: Summary of Teak Seeds collected in the Seed Orchards and Seed Production Areas

Region	Forest District	Forest Reserve	Status	Compt/ Series	Seeds Collected (Kg)	Price of seeds (GH¢)	Value of seeds collected (GH¢)	of
Brong Ahafo	Sunyani	Tain II	SPA	297/301	42		1,050	
		Tain II	International Seed Provenance	242	129		6,450	
Volta	Jasikan	Apepesu River Kabo River Odomi River	SPA SPA SPA	Pampawie Worawora Teteman	396 324 374		13,860 11,340 13,090	
Eastern	Kade	Ajenjua Bepo	SO (Kihuwi)	20	58		2,030	
Central	Dunkwa	Oppon Mansi	SO (Kihuwi)	30	102		5,100	
Ashanti	Nkawie	Asenanyo	SO (Kihuwi)	123	735		36,750	
Brong Ahafo	Goaso	Bia Tano	SO (Kihuwi)	8	544		27,200	
Western	Tarkwa	Bonsa River	SO (Kihuwi)	34	10		350	
	Total				2,714		117,220	

Plus trees within the seed orchards and SPAs were marked for retention prior to improvement thinning scheduled for second and third quarters of 2015.



Figure 14: Teak Seed Production Area within the Tain II Forest Reserve, Sunyani Forest District (Plus trees marked for retention)



Figure 15: Kihuhwi provenance Teak seed Orchard, Bia Tano Forest Reserve, Goaso Forest District

4.0 MAINTENANCE OF FC PLANTATIONS

In 2014, a budget of approximately GH¢13 million was presented for the tending, survival survey, beating up and procurement of seedlings with respect to the maintenance of an estimated 21,665ha of 2010 – 2013 plantation coupes. This area comprised 18,148ha established between 2010 and 2012 by Messrs Zoil and Ecotech Ltd and handed over to the Forestry Commission; and 2,857ha established directly by the Forestry Commission in 2013.

Due to non-release of funds the maintenance activities could not be undertaken.

5.0 FIRE INCIDENCES IN THE 2014/2015 FIRE SEASON

The key fire protection interventions undertaken to mitigate fire incidences in the 2014/2015 fire season were sensitization and awareness creation by RMSC and FSD field officers, and regular fire patrolling during the dry season by Forest Guards and Community Fire Volunteers (especially 2013 coupes).

At the end of March 2015, reports indicated that 5,025ha of forest plantations on-reserve established from 2010 to 2013 across the country had been affected by fire compared to 3,272ha affected by fire in 2013/2014 fire season. The affected districts and coupes are detailed in Appendix III. The regional summary is presented in Table 8. No reported incidence of wildfires were received from the Western and Central Regions.



Figure 16: GPDP/HIPC 2006 Teak stand in the North Bandai Hills Forest Reserve ravaged by wildfire

Table 8: Regional summary of reported area (ha) burnt by wildfire within the 2010 - 2013 plantation coupes

REGION		COUPE										
REGION	2010	2011	2012	2013	TOTAL							
Ashanti	12	0	0	53.3	65.3							
Brong Ahafo	157.6	45.5	95.5	9	307.619							
Eastern	127	1	11.6	5.7	145.6							
Gt. Accra	40	37	0	3	80							
Northern	630	656.6	841.1	309.9	2,437.91							
Upper West	161	31	62.96	5	259.96							
Upper East	858	272	94.2	39	1,263.2							
Volta	220	36.1	168	41.5	465.87							
Grand Total	2,207	1,079	1,273	466.4	5,025.459							

6.0 FOOD PRODUCTION WITHIN 2012 TO 2014 PLANTATION COUPES

In 2014, an estimated 17,119.72 Metric Tonnes (Mt) of food crops were produced from the 9,475ha of forest plantations planted by the FC from 2012 to 2014. This data did not include 2014 plantain and cocoyam produce.

The major crops produced were as follows: Plantain - 10,060.19MT, Cereals (maize, millet and rice) - 2,896.59MT, Tubers (Cocoyam, Cassava and Yam) - 2,964.77MT, Legumes (Beans, Cowpea, Groundnut and Sorghum) - 414.75MT and Vegetables (Tomato, Pepper, Garden Eggs) - 783.42MT. A summary of the food production per region is shown in Table 7 and Figure 17 below with the details with respect to the various coupes shown in Appendix IV.

Table 9: Summary of food production in 2014 (2012 and 2013 coupes)*

REGION	PLANTAIN (Mt)	CEREALS (Maize, Millet, Rice) (Mt)	TUBERS (Cocoyam, Cassava, Yam) (Mt)	LEGUMES (Beans, Cowpea, Groundnut, Sorghum) (Mt)	VEGETABLES (Tomato, Pepper, Garden Eggs) (Mt)	TOTAL FOOD PRODUCTIO N (Mt)
Ashanti	4,160.70	811.82	764.74	56.76	616.10	6,410.12
Brong Ahafo	1,077.92	716.60	396.74	71.79	167.32	2,430.37
Central	1,428.64	75.59	122.23	4.27	-	1,630.73
Eastern	2,334.49	209.90	472.80	21.44	-	3,038.62
Greater Accra	-	-	-	-	-	-
Northern	-	648.31	1,128.96	80.16	-	1,857.43
Upper East	-	258.42	-	36.68	-	295.09
Upper West	-	64.64	-	139.32	-	203.96
Volta	3.08	22.95	-	4.34	-	30.37
Western	1,055.35	88.38	79.30	-	-	1,223.03
TOTAL	10,060.19	2,896.59	2,964.77	414.75	783.42	17,119.72

^{*} Food production estimated as follows: Plantation Area reported intercropped with food crops x MOFA 2010 Av. Yield (Mt/ha) x specific crop production factor [plantain:70%, Yam:70%, Cocoyam:30%, Maize:100%]

¹Agriculture in Ghana, Facts and Figures (2010), Ministry of Food and Agriculture, 2011.

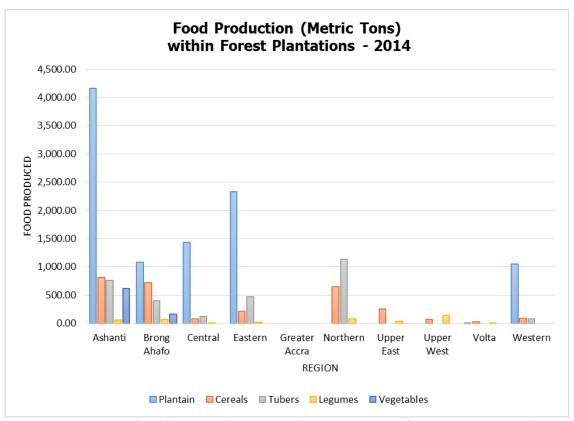


Figure 17: Food Production within Forest Plantations in 2014 (2012 & 2013 coupes)

7.0 PROGRAMME MONITORING

The Parliamentary Select Committee on Lands and Forestry undertook a visit to plantation sites in the Brong Ahafo Region while the Forestry Commission Board undertook a visit to plantation sites in the Northern Region. Issues of non-maintenance of established plantations were confirmed during the field visits. During the period monitoring visits were undertaken by staff from the FSD Headquarters, Regional and District offices to plantation sites across the country.



Figure 18: Staff from FSD Headquarters and Juaso Forest District inspecting EcoPlanet Bamboo LLC nursery near the North Bandai Hills Forest Reserve.

8.0 CHALLENGES

8.1 Sustainable Funding of Plantation Establishment and Maintenance

The key challenge to the NFPDP is the absence of a reliable and adequate source of funding for plantation establishment and maintenance by Government.

8.2 General Condition of Established Plantations On-Reserve

Out of the total of 177,296 ha established by Forestry Commission and the private sector, the Forestry Commission (FC) currently has an estimated 140,000 ha of plantations established since 2002 under its management. Out of this large forest plantation estate, an estimated 68,000 ha of plantations established between 2007 and 2013 are in urgent need of proper maintenance, fire protection, rehabilitation and other silvicultural interventions, especially; weeding, pruning and thinning. The estimated 72,000 ha established between 2002 and 2006 require thinning, pruning and fire protection.

Many of these plantation stands have not received any maintenance since establishment leading to stunted growth through intense competition with weeds, development of crooked boles and profuse branching which reduces the optimum wood quality on maturity. The intense competition with weeds

has led to high mortality with resultant large gaps of failed areas within the stands.

A more serious consequence of the long years of neglect and lack of maintenance is the annual ritual of wildfires that ravage many of these plantations resulting in either complete loss of some stands, retarded/stunted growth and reduction in wood quality. The incidence is facilitated by the high fuel load stocked within these stands. Recent visits in 2015 to some selected plantations in the Ashanti Region revealed a very sad and disturbing spectacle of large areas of established plantations being smothered by weeds, with other areas either completely or partially burnt.

Over a period of 3 years (2011 - 2013) an estimated 10,100 ha of established young plantations with a conservative value of \$60,600,000 (\$6,000/ha) has been lost to wildfire due to lack of proper maintenance and implementation of effective fire protection activities stemming from inadequate funding.

8.3 Other Challenges

Additional challenges to the management of the established FC plantations comprise the following:

- i. Inadequate Motorbikes and vehicles for field monitoring by FSD.
- ii. Annual destruction of planted areas by wildfire
- iii. Destruction of planted seedlings by cattle (Fulani Herdsmen)
- iv. Disagreements over off-reserve Benefit Sharing Arrangement under the EPP between Government and Land owners

9.0 WAY FORWARD

• Sustainable Funding for Plantation Establishment and Maintenance

To ensure sustainable funding for plantation establishment and maintenance it is essential that the Forestry Commission seeks in addition to Government budgetary support, additional sustainable sources of funds. In pursuit of this objective, the FC board requested the FSD to submit proposals for consideration.

A cross-functional team has been set up to develop proposals for additional and innovative financing options for the establishment and maintenance of forest plantations.

Public Private Partnership (PPP) with private investors for the maintenance of established FC plantations and coppice management

To reduce the costs burden of the FC with respect to the maintenance of the established plantations and coppice management of harvested teak plantation stands, the FC is evaluating innovative financing options to attract private investments through appropriate public-private partnership schemes. Proposals for the PPP models are currently being developed by the cross-functional team.

 Field verification of all reported areas of plantations established under the Modified Taungya System (MTS), Community Forestry Management Project (CFMP) and the Private Commercial Developers on-reserve.

As indicated in this report, field verification of reported areas of plantations established under the Modified Taungya System (MTS) and Community Forestry Management Project (CFMP) have been initiated. It is important that these are completed together with the areas reported to have been established by Private Commercial Developers on-reserve.

Refresher training for field staff.

Refresher training to be undertaken for field staff to hone skills of GPS handset usage and mensuration of plantation stands.

• Procurement of additional motorbikes and 4X4 vehicles for the various forest districts to facilitate field operations and monitoring of the NFPDP.

The current state of the field vehicles and motorbikes are hampering the efficiency of field operations and monitoring due to frequent breakdowns and very high cost of maintenance.

 Finalise and implement the Ghana Forest Plantation Strategy which seeks to among others, create an enabling environment for public and private investments in forest plantations

Three internal stakeholder consultative workshops were held with staff of the Forest Services Division across the 10 regions of Ghana to solicit their comments on the draft strategy document. The workshops were held in Tamale (for participants from the Upper East, Upper West and Northern Regions), Ejisu (for participants from the Ashanti, Brong Ahafo and Western Regions) and Accra (for participants from the Eastern, Central, Volta and Greater Accra Regions).

Consultative workshops have been scheduled for external stakeholders (Traditional Authorities, Opinion Leaders, Members of Parliament, MMDAs, NGOs, CSOs) across the country in 2015 to also solicit their comments on the draft document. This shall be followed by a validation workshop and the publishing and launching of the document.

APPENDICES

					201	5 ASSESSMENT OF I	C/INDUSTRY P	LANTATIONS					
REGION	FOREST DISTRICT	FOREST RESERVE	No of sites	COMPT./ SITE	FRINGE COMMUNITY	SPECIES PLANTED	Previous verified area (ha)	VERIFIED AREA (Ha)	PERCENTA GE SURVIVAL %	COUPE	REMARKS		
				20 Patch 1	Aprokumase	Cedrela, Ofram, Kusia	n/a	30.831		2014	no survival survey was undertaken due to extensive weeds		
				20 Patch 2	Badukrom	Cedrela, Ofram	n/a	10.307		2014	no survival survey was undertaken due to extensive weeds		
			4	20 Patch 3	Badukrom	Cedrela, Ofram	n/a	9.4563		2014	no survival survey was undertaken due to extensive weeds		
				20 Patch 4	Badukrom	Cedrela, Ofram	n/a	2.4198		2014	no survival survey was undertaken due to extensive weeds		
			subtotal				0	53.0141					
				26 Patch 1	Baadu	Cedrela, Ofram	n/a	14.255		2014	no survival survey was undertaken due to extensive weeds		
		Essen Epam	3	26 Patch 2	Baadu	Cedrela, Ofram	n/a	6.8103		2014	no survival survey was undertaken due to extensive weeds		
				26 Patch 3	Sunsumawu	Cedrela, Ofram	n/a	2.9069		2014	no survival survey was undertaken due to extensive weeds		
		O da	subtotal				0	23.9722					
			1	17	Dwindaama	Ceiba, Cedrela, Kusia, Wawa, Ofram	109.74 (85%)	116.717	92.22	2013	The gross area of the site is 123.84ha. However, admitted farms constitute 7.123ha		
				20114	Mofram	Ceiba, Cedrela, Kusia, Wawa,	45 (700()	54.407	05.40	2013	F		
Eastern	Akim Oda					2	3 Patch 1 3 Patch 2	Mofram	Ofram Ceiba, Cedrela, Kusia, Wawa, Ofram	45 (78%) 26 (75%)	54.497 28.083	85.49 87.81	2013
			subtotal	3 : 0 : 0 : 0			71	82.58	07.02		2.000.00		
			10		Reserve Tot	al	180.74	276.2833					
			2		Afiantiangya / Nkansaso No. 2	Ceiba, ofram, mansonia, kusia, otie	10.7 (80%)	10.956		2010	no survival survey was undertaken due to extensive weeds		
					Afiantiangya / Nkansaso No. 1		3.35 (60%)	3.4307		2012	no survival survey was undertaken due to extensive weeds		
			subtotal				14.05	14.3867					
			1	FORIG Research	Anwanwinso	Ceiba, Cedrela, Ofram	44.95 (68%)	45.772		2011	no survival survey was undertaken due to extensive weeds		
		Pra Anum	Workin	Working Area	Charliewatey	Cedrela, Ofram	n/a	78.005		2014	The gross area of the site is 88.172ha. However, 10.167ha is an admitted farm and a teak provenance		
					Charliewatey	Paulownia	5.07 (18%)	3.7547		2014	no survival survey was undertaken due to extensive weeds		
			subtotal]			5.07	81.7597					

REGION	FOREST DISTRICT	FOREST RESERVE	No of sites	COMPT./ SITE	FRINGE COMMUNITY	SPECIES PLANTED	Previous verified area (ha)	VERIFIED AREA (Ha)	PERCENTA GE SURVIVAL %	COUPE	REMARKS
			1		Mronam	Cedrela, Ofram	n/a	29.799		2014	no survival survey was undertaken due to extensive weeds
			6		Reserve Tot	tal	64.07	171.7174			
		Regional Total	16				244.81	448.0007			
				27		Cedrela, Ofram	n/a	38.2	65		Plot was weedy. Percentage survival was an ocular estimation by the assessment team within the few cleared areas
	Nkawie	Asenanyo	3	150		Paulownia	22.8 (52%)	35.8	67		Extension of 13ha. Portions very weedy and require immediate tending. Ocular estimation of survival percentage.
				151		Cedrela, Wawa, Ofram	n/a	70.67	82	2014	No tracking was undertaken because the supervisor reported that no additional planting had been done after the earlier assessment. Ocular estimation of percentage survival.
					Reserve Total		22.8	144.67			
				99		Teak	n/a	54.2	80	2014	Growth of seedlings was not encouraging
		Opro River	2	2		Cedrela, Ofram	46.1 (83%)	46.1	83		No tracking and survival survey were carried out. Ocular observation indicated no changes
					Reserve Total		46.1	100.3			
		Afram	1	9		Teak	n/a	77.26	76	2014	Vast portion of the plot was weedy
		Headwaters		, 1	Reserve Total	T	0	77.26			
				45 (A & B)		Teak	26.07 (67%)	8.93	78	_	Reduction of 17.14ha .There is a need for effective fire protection of the stand .
				30		Teak, Ofram	n/a	48.2	86	2014	
Ashanti				35		Cedrela	failed			2011/ 2013	No tracking and survival survey were carried out due to extensive weeds. Inability to distinguish the boundaries of the site from the external vegetation
	Offinso			37		Cedrela	failed			7013	No tracking and survival survey were carried out due to extensive weeds. Inability to distinguish the boundaries of the site from the external vegetation
		Mankrang	10	38 (A)		Teak, Cedrela,	13.38 (74%)	13.38	89		No tracking was done as no additional area was reported planted
		River		38 (B)		Ceiba	1.08 (81%)	1.08	88	2013	No tracking was done as no additional area was reported planted
				40		cedrela	28.06 (72%)	28.06		-	no tracking or survival survey undertaken due to extensive weeds

REGION	FOREST DISTRICT	FOREST RESERVE	No of sites	COMPT./ SITE	FRINGE COMMUNITY	SPECIES PLANTED	Previous verified area (ha)	VERIFIED AREA (Ha)	PERCENTA GE SURVIVAL %	COUPE	REMARKS
										2011/	no tracking or survival survey undertaken due to
				41		cedrela teak ofram	124 (78%)	124		2013	extensive weeds
										2011/	no tracking or survival survey undertaken due to
				42		ceiba, teak, ofram	105.9 (75%)	105.9			extensive weeds
						cedrela, teak,				2011/	no tracking or survival survey undertaken due to
				43		ofram	14.8 (80%)	14.8			extensive weeds
										2011/	no tracking or survival survey undertaken due to
				44		cedrela	failed			2013	extensive weeds
						ofram, cedrela,				2011/	no tracking or survival survey undertaken due to
				46		teak	26.63 (75%)	26.63		2013	extensive weeds
				1	Reserve Total		339.92	370.98			
		Regional									
		Total	16				408.82	693.21			
Gran	d Total		32				653.63	1141.2107			

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
1	Addai Brothers Lumber Company Limited	Ashanti	Juaso	Bandai Hills	16, 17, 19, 25	512	0.0	45.0	31st January, 2001	Teak
2	Agogo Church of Pentecost	Ashanti	Juaso	Bandai Hills	6, 8	205.64	0.0	23.0	5th February, 2001	Teak
3	St. Augustine's Catholic Church (Agogo Roman Catholic Church)	Ashanti	Juaso	Bandai Hills	14,18	276.43	0.0	60.0		Teak
4	Agogo Saviour Church	Ashanti	Juaso	Bandai Hills	55	135.223	0.0	45.0		Teak
5	Apostle Nicholas Appiah Missah & Children	Ashanti	Juaso	Bandai Hills	1	131.3	0.0	4.0	13th June, 2013	N/A
6	The Apostolic Church - Ghana	Ashanti	Juaso	Bandai Hills	68,69	256	0.0	50.0	30th August, 2007	Teak
	CERACOR (Center for Reporty Alleviation and				38	128	0.0	0.0		N/A
7	CEPACOD (Center for Poverty Alleviation and Community Development)	Ashanti	Juaso	Bandai Hills	47	128	0.0	30.0	10th August, 2006	Teak
8	Concerned Citizen Group - Agogo	Ashanti	Juaso	Bandai Hills	54	128	0.0	0.0		N/A
9	Dr. Kwabena Twum - Nuamah	Ashanti	Juaso	Bandai Hills	60	103.31	0.0	0.0	4th November, 2014	N/A
10	Elder Sampson Yeboah & Frank Aboagye	Ashanti	Juaso	Bandai Hills	7	106.13	0.0	3.0	13th June, 2013	Teak
11	Gyima & Co. Farms Ltd	Ashanti	Juaso	Bandai Hills	15, 26	269.35	0.0	82.0	5th February, 2001	Teak
12	Hon. Kwadwo Baah Agyemang	Ashanti	Juaso	Bandai Hills	61	114	0.0	0.0	4th November, 2014	N/A
13	Isaac Owusu Farms	Ashanti	Juaso	Bandai Hills	28	147.96	0.0	10.0	12th December, 2011	Teak
14	K&P Farms (Nana Kwadwo Poku Bonsu)	Ashanti	Juaso	Bandai Hills	56	161.97	0.0	0.0	19th December, 2011	N/A
15	Kate Koroma	Ashanti	Juaso	Bandai Hills	41	133.22	0.0	10.0	12th December, 2011	Teak
16	Kwame Kyei Enterprise	Ashanti	Juaso	Bandai Hills	11	128	0.0	0.0	9th December, 2014	N/A
17	Kwame Kyei Farms	Ashanti	Juaso	Bandai Hills	62	117.15	0.0	11.0	19th December, 2011	Teak
18	M'akaddesh Printing Press and Farms	Ashanti	Juaso	Bandai Hills	72	204.74	0.0	60.5	21st August, 2006	Teak
19	Mapad Enterprise	Ashanti	Juaso	Bandai Hills	27	163.39	0.0	106.0	17th October, 2006	Teak
20	Me Dwene Meho Enterprise	Ashanti	Juaso	Bandai Hills	58	106.88	0.0	0.0	9th December, 2014	N/A
21	Mr. Otuo Serebour	Ashanti	Juaso	Bandai Hills	63	120.61	0.0	0.0	14th May, 2012	N/A
22	Nana Akuoku Sarpong Farms	Ashanti	Juaso	Bandai Hills	20, 21, 22, 23, 24	689.781	0.0	82.5	5th February, 2001	Teak
23	Obebew Ventures	Ashanti	Juaso	Bandai Hills	46	128	0.0	15.0	10th March, 2005	Teak
24	Oppong-Mensah Enterprise	Ashanti	Juaso	Bandai Hills	70	128	0.0	10.0	18th December, 2007	Teak
25	Pascal Gaye	Ashanti	Juaso	Bandai Hills	29	145	0.0	42.0	24th February, 2009	Teak
26	Prof A.B Akosa	Ashanti	Juaso	Bandai Hills	66	119.95	0.0	10.0	29th March, 2007	Teak
27	Samrose Company Limited	Ashanti	Juaso	Bandai Hills	12	128	0.0	20.0	13th March, 2007	Teak
28	Tropical Farm Estates Limited	Ashanti	Juaso	Bandai Hills	48, 49, 50, 51	519.206	0.0	14.6	31st January, 2001	Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
29	Antwi Boasiako Farms	Ashanti	Juaso	Dome River	5	147.424	0.0	7.0	27th Oct. 2009	Teak
30	Benakuf Timber and Trading	Ashanti	Juaso	Dome River	30	99.2	0.0	28.0	9th December, 2002 30th January, 2004	Teak
31	Double Ben Construction Ltd	Ashanti	Juaso	Dome River	21	98.91	0.0	0.0	22nd September, 2009	N/A
32	D.T.K Timbers	Ashanti	Juaso	Dome River	20,26,35	384	0.0	90.0	16th July, 2004 21st July, 2004	Teak, Cedrela
33	Juaso Traditional Authority	Ashanti	Juaso	Dome River	25,27	250	51.8	111.8	28th April, 2003	Wawa, Manzonia, Mahogany, Ofram, Emire
34	KAMVIS	Ashanti	Juaso	Dome River	19	281.54	0.0	12.0	16th April, 2003	Teak
35	K. Green Global	Ashanti	Juaso	Dome River	36	128	0.0	0.0	10th December, 2013	N/A
36	Kwame Bi Kufour	Ashanti	Juaso	Dome River	39	128	0.0	30.0	11th August, 2003	Teak
37	Konam Ventures	Ashanti	Juaso	Dome River	12	128	0.0	0.0	13th March, 2014	N/A
38	LI- Chan Enterprise Gh. Ltd	Ashanti	Juaso	Dome River	10	134.59	0.0	13.0	9th Dec. 2002	Teak
39	Margaret Campbell	Ashanti Ashanti	Juaso Juaso	Dome River Dome River	46 41	114.64	0.7	7.7	16th March, 2011 27th August, 2014	Teak N/A
40	Obogu Traditional Council	Ashanti	Juaso	Dome River	37, 47		0.0	0.0		N/A
41		A chamti	luaca	Domo Bivor	40	125	0.0	11.2	9th April, 2003	Teak
41	PIDECK Co. Ltd	Ashanti	Juaso	Dome River	45	125	0.0	0.0	25th June, 2003	
42	Premier Solutions Limited	Ashanti	Juaso	Dome River	33	128	0.0	0.0	10th December, 2013	N/A
43	Talento Wood Processing Enterprise	Ashanti	Juaso	Dome River	29	135.51	0.0	40.0	12th May, 2005	Teak
44	Wukupomaa Export and Import Company Limited	Ashanti	Juaso	Dome River	44	139.354	0.0	10.0	10th August, 2005	Teak
45	Y & M Regeneration Ltd	Ashanti	Juaso	Dome River	22	118.71	0.0	18.0	17th September, 2009	Teak
46	Apostiga Company Limited	Ashanti	Juaso	Mirasa Hills	12,13,19	378.2	0.0	270.0	20th March, 2003	Teak
47	Beige Leaf Limited	Ashanti	Juaso	Mirasa Hills	18	128	0.0	0.0	8th December, 2011	N/A
48	Coxwain Investment	Ashanti	Juaso	Mirasa Hills	21B	87.885	0.0	0.0	6th January, 2011	N/A
49	PIDECK Limited	Ashanti	Juaso	Mirasa Hills	40A 40B	128 128	0.0	10.5 0.0	23rd April, 2003	Teak N/A
_					3	128	0.0	10.0	24th February, 2003	Teak
50	Logwood Industries Limited	Ashanti	Juaso	Mirasa Hills	7	128	0.0	0.0	23rd February, 2003	N/A
51	Lou-Ralph Lodge Investment	Ashanti	Juaso	Mirasa Hills	22	128.574	23.0	96.0	26th February, 2010	Teak
52	Mr. Samuel Benson-Adjei	Ashanti	Juaso	Mirasa Hills	49	117.505	0.0	31.0	22nd September, 2009	Teak
53	New Leaf Investment Limited	Ashanti	Juaso	Mirasa Hills	48	113.315	0.0	113.3	16th April, 2008	Teak, Mahogany, Wawa, Kusia, Odum, Ofram, Mansonia, Kokrodua

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
54	Pen Pal Wood Processing Limited	Ashanti	Juaso	Mirasa Hills	20, 25	500	0.0	36.9	8th July, 2003	Teak
55	SKOD Timbers	Ashanti	Juaso	Mirasa Hills	26, 27 50	128	0.0	10.0	16th June, 2003 6th May, 2003	Teak
		Ashanti	Juaso	Mirasa Hills	38	127.82	0.0	0.0	13th December, 2011	N/A
56	Talento Wood Processing Enterprise	Ashanti	Juaso	Mirasa Hills	39	175.552	0.0	80.0	26th October, 2009	Teak
57	Thomas Boateng Enterprise	Ashanti	Juaso	Mirasa Hills	10	128	0.0	0.0	14th October, 2014	N/A
58	Upstream Investment	Ashanti	Juaso	Mirasa Hills	21A	54.665	0.0	0.0	6th January, 2011	N/A
59	Aboagye Danso Samuel	Ashanti	Juaso	North Bandai Hills	41	128.6	0.0	0.0	30th January, 2013	N/A
60	Asante Akyem Wood Processing Co. Ltd (AWP)	Ashanti	Juaso	North Bandai Hills	60,62	213.18	0.0	30.0	23rd December, 2002	Teak
61	Charity Asiedu	Ashanti	Juaso	North Bandai Hills	39	124.5	0.0	0.0	14th October, 2013	N/A
62	Charles Awuah Enterprise	Ashanti	Juaso	North Bandai Hills	59	124	0.0	0.0	11th December, 2014	N/A
63	Ecoplanet Bamboo WA I, LLC	Ashanti	Juaso	North Bandai Hills	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25	3340	0.0	0.0	17th November, 2014	N/A
64	Galaxy Agro Industries Limited	Ashanti	Juaso	North Bandai Hills	53	128	0.0	0.0	10th December, 2014	N/A
•		ronanci		The fall ball and thing	57	128	0.0	0.0	15th October, 2014	N/A
65	Kpapa Company Limited	Ashanti	Juaso	North Bandai Hills	45	128	0.0	0.0	4th November, 2014	N/A
66	Noble 'G'	Ashanti	Juaso	North Bandai Hills	43	128.43	0.0	0.0	30th January, 2013	N/A
67	Yaw Asamoah	Ashanti	Juaso	North Bandai Hills	55	133.89	0.0	0.0	8th November, 2013	N/A
68	Yonka Farms	Ashanti	Juaso	North Bandai Hills	58	103.296	0.0	0.0	29th October, 2009	N/A
69	Boakyewaa Enterprise Limited (BEL)	Ashanti	Juaso	Onyimso	3 6	508.655	0.0	350.0	20th Nov. 2002 16th August, 2005	Alanbrakia, Kusia, Ceiba, Odum, Makore, Wawa,
					4,5				30th January, 2007	Ofram, Mahogany, Emire
70	Prashanti Export Limited	Ashanti	Kumawu	Anumso	22	200	0.0	91.0	30th May, 2001	
71 72	Abrofo Farms & Trading Enterprise	Ashanti	Kumawu	Boumfum	132, 136, 141	384	0.0	45.0	18th March, 2005	Tools
73	Aid to Artisan Ghana Asadu Royal Waste	Ashanti Ashanti	Kumawu Kumawu	Boumfum Boumfum	153, 158, 159 121	557.65 128	0.0	75.0 0.0	10th April, 2003 21st November, 2012	Teak N/A
74	Ashanti Youth Agro Forestry Organization (A.Y.A.O)	Ashanti	Kumawu	Boumfum	18	149.4	0.0	40.0	25th January, 2001	
75	Bibiani Logging and Lumber Company Limited (BLLC)	Ashanti	Kumawu	Boumfum	23, 25-27, 34	637	0.0	100.0		Cedrela, Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
76	Dale Brook Company Ltd	Ashanti	Kumawu	Boumfum	56,65,75,76,77,83, 84, 85,91,92,93,98 and portions of 57,66,67	1627.26	0.0	128.5		Teak
77	Duadem Inventory Company Limited	Ashanti	Kumawu	Boumfum	185, 186, 192, 193	500	0.0	90.0	25th January, 2001	
78	Ejisu Forest Products	Ashanti	Kumawu	Boumfum	220, 221, 222, 217	128	0.0	0.0	30th January, 2001	
79	Forjane	Ashanti	Kumawu	Boumfum	143	119.34	0.0	2.0	23rd January, 2006	
80	Ghana Sawn Timber Sellers Association	Ashanti	Kumawu	Boumfum	126, 122	255.9	0.0	54.0	15th December, 2006	
81	Ghana Timber Association (G.T.A)	Ashanti	Kumawu	Boumfum	144, 145, 147, 148,150, 151	860	0.0	44.7	25th January, 2001	
82	Greenfields Plantations Limited (A.G Timbers Ltd)	Ashanti	Kumawu	Boumfum	4, 5, 6, 8, 10, 11, 12, 13, 14, 17, 20, 21	1830.56	0.0	775.5		Teak, Wawa, Cedrela, Mahogany, Ceiba, Kokrodua, Apro, Ofram
83	Holly-pat Enterprise	Ashanti	Kumawu	Boumfum	142	128	0.0	0.0	26th February, 2013	N/A
84	Johnson Agyeman Farms	Ashanti	Kumawu	Boumfum	79, 80	190.78	0.0	160.0	23rd March, 2006	Teak
85	KWAMOKA Farms & Processing Limited	Ashanti	Kumawu	Boumfum	223	90.97		0.0	5th November, 2012	N/A
86	MIRO Forestry (Ghana) Limited	Ashanti	Kumawu	Boumfum	(Agogo Portion) 120,123,124,127, 131, 134, 135, 138, 139, 140, 156, 155, (Kumawu Portion) 29,30,48,52,53, 54,55,61,62,63, 64,70, 72, 75, 78, 89, 90, 96, 97, 101, 102, 103, 106, 108, 109, 111	5002.28	500.0	1162.9	18th May, 2009	Teak, Cedrela, Eucalyptus, few indigenous species
87	MIRO Forestry (Ghana) Limited	Ashanti	Kumawu	Boumfum	87, 88, 94, 105, 107, 110, 112, 119, 130, 146, 160, 115	1536	0.0	0.0	21st November, 2012	
88	Nana Yaw Omane Frimpong	Ashanti	Kumawu	Boumfum	99, 100, 133	400	0.0	65.5	6th January, 2004	
89	Premier Solutions	Ashanti	Kumawu	Boumfum	120	128	0.0	0.0	4th December, 2012	
	Zebra Imex Ltd	Ashanti	Kumawu	Boumfum	81, 82	239.15	0.0	20.0	20th April, 2007	
91	Logwood Industries Limited		Mampong	Abrimasu	7,8	200	0.0	100.0	2002	Teak
92 93	Sarprim Farms & Trading Company Ltd Dufie Amponsah Farms	Ashanti Ashanti	Mampong Mampong	Abrimasu Awura	6	126 109.85	2.0 0.0	92.0	9th April, 2003 11th January, 2005	Teak
94	Ernest Best Company Ltd						0.0	35.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Teak
95	Forest Business Consultancy Limited	Ashanti Ashanti	Mampong Mampong	Awura Awura	38 19	121.5 128	0.0	35.0	8th July, 2013	теак
96	Greenfields Plantations Limited (Naja David Veneer and PlyWood)	Ashanti	Mampong	Awura	13	2039.33	30.0	507.0	11th December, 2000	Teak, Cedrela, Ceiba, Mahogany

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
97	Gyamfi & Asare Co. Ltd	Ashanti	Mampong	Awura	41	137.31	0.0	5.0	15th January, 2010	Teak
98	Help Crush Aids Ghana	Ashanti	Mampong	Awura	42	120	4.0	46.0	28th February, 2005	Teak
99	Jenfriskar Limited	Ashanti	Mampong	Awura	90	105.25	0.0	0.0	28th October, 2005	
100	Karamanga Industries Limited	Ashanti	Mampong	Awura	39, 40, 45	391.12	0.0	146.4	25th November, 1999	Teak
101	KuulTrade Enterprise	Ashanti	Mampong	Awura	12	128.49	8.0	94.5	19th April, 2005	Teak
102	Kwasi Agyekum Farms	Ashanti	Mampong	Awura	31	165.31	4.0	52.0		Teak
103	Litsworth Impex Ltd	Ashanti	Mampong	Awura	9	155.579	8.0	97.0	19th April, 2005	Teak
104	NABE Wood Processing Co. Ltd	Ashanti	Mampong	Awura	23	100	0.0	60.0	20th Nov. 2002	Teak
105	R.K.A.Timbers Limited	Ashanti	Mampong	Awura	20	103.176	0.0	25.0	2002	Teak
106	reNew Company Limited	Ashanti	Mampong	Awura	47, 48, 49, 50, 51, 53, 54, 55, 56, 57	1347.303	0.0	5.0	5th February, 2009	Teak, Mahogany
107	Abeam Danso Poku Sarfo Limited	Ashanti	Mampong	Chirimfa	86	363.74	5.0	25.0	2nd February, 2010	Teak
108	Antioch Timbers	Ashanti	Mampong	Chirimfa	73	53.81	0.0	0.0	27th August, 2014	N/A
109	Daniel Ohene Darko	Ashanti	Mampong	Chirimfa	89	155.89	0.0	0.0	2007	-
110	Elder Jewellery	Ashanti	Mampong	Chirimfa	71	110.6	2.0	52.0	2nd April, 2008	Teak
111	Goose Green Company Limited	Ashanti	Mampong	Chirimfa	12	120	0.0	1.0	30th January, 2003	
112	Greenfields Plantations Limited (Paul Sagoe)	Ashanti	Mampong	Chirimfa	1,2	129.52	0.0	4.0	30th December, 2002	Teak
113	Heureka Consult Limited	Ashanti	Mampong	Chirimfa	74	85	0.0	0.0	23rd December, 2014	N/A
114	JOSBOA Consulting Limited	Ashanti	Mampong	Chirimfa	20, 21	273.88	30.0	40.0	9th April, 2013	Teak
115	Joseph Antwi (Kwame Amoah)	Ashanti	Mampong	Chirimfa	82	118.19	0.0	10.0		Teak
116	Kwarteng Plantations	Ashanti	Mampong	Chirimfa	3	94.1	0.0	9.0	12th December, 2008	Teak
117	Kumasi Farms Complex	Ashanti	Mampong	Chirimfa	26	151.62	7.0	48.9	20th February, 2006	Teak
118	K-Wuss Enterprise	Ashanti	Mampong	Chirimfa	27	140.14	6.0	71.0	20th April, 2007	Teak
119	Kyeremateng Tieku & Sons Ltd	Ashanti	Mampong	Chirimfa	18	100.9	5.0	70.0	7th April, 2004	Teak
120	Mag K Enterprise	Ashanti	Mampong	Chirimfa	22	142.17	6.0	81.0	20th April, 2007	Teak
121	Onyame Tumiso Company Ltd	Ashanti	Mampong	Chirimfa	13	91.648	0.0	43.6	31st December, 2002	Teak
122	Richard William Quaynor	Ashanti	Mampong	Chirimfa	88	157.54	0.0	67.5	2007	Teak
123	Vanexx Enterprise	Ashanti	Mampong	Chirimfa	77	60.31	15.0	25.0	15th February, 2012	Teak
124	Evans Timbers Ltd	Ashanti	Mampong	Pru Shelter belt	6	148.32	0.0	58.0	2002	Teak
125	Jeed-San Farms	Ashanti	Mampong	Pru Shelter belt	36	120	5.0	74.0	2009	Teak
126	Nsiah Gyamerah	Ashanti	Mampong	Pru Shelter belt	5	127.4	0.0	20.5	2009	Teak
127	Opmanpok Ent	Ashanti	Mampong	Pru Shelter belt	4	120	0.0	4.0	23rd January, 2006	Teak
128	Unity Afforestation and Tree Nursery Project	Ashanti	Mampong	Pru Shelter belt	39, 44	221.42	10.3	135.3	20th May, 2005	Teak
129	Abaascom Ent Ltd	Ashanti	Mankranso	Desiri	114	152.5	0.0	64.0	24th December, 2002	Cedrela, Teak
130	Duncan Williams	Ashanti	Mankranso	Desiri	39	92.7	5.0	5.0	2002	Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
131	GAC (Nana Adu Kwabena Gabriel Co. Ltd)	Ashanti	Mankranso	Desiri	88, 108, 113	385	0.0	385.0	24th February, 2003	Cedrela, Teak
132	Greenfields Plantations Limited/ Scanstyle	Ashanti	Mankranso	Desiri	63,72,73,81,82, 91,92, 103, 117	359.92	5.0	34.4		Cedrela, Teak
133	Opanin Twene Kwame Company Ltd.	Ashanti	Mankranso	Desiri	9,10	292.02	5.0	93.0	1984 ?	Wawa, Manzonia, Odum, Edinam, Utile, Mahogany, Ofram, Onyina, Akata, Asanfina, Hyeduakyenkyen, Teak, Sapele, Otie, Cedrela, Teak, Emire
134	TSL (Tepa & Techiman Sawmills Ltd)	Ashanti	Mankranso	Desiri	89, 90	256	0.0	76.0		Cedrela, Teak
135	Nana Osei Akoto	Ashanti	Mankranso	Tinte Bepo	86, 90	143.5	0.0	0.0	23rd January, 2008	N/A
136	Akwasi Agyei & Opoku Timbers (KAGO)	Ashanti	Nkawie	Jimira	8	128	0.0	60.0	6th January, 2004	Cedrela, Teak
137	Benakuf Timber and Trading	Ashanti Nkawie Jimira		Jimira	15	99.92	0.0	25.0	2004	Cedrela, Teak
138	Maybrob Co. Ltd/ Central Market Folksline Women's Association	Ashanti	Nkawie	Jimira	5, 7&42, 40&44	683.11	0.0	221.0	23rd March, 2004 6th January, 2004? 15th June, 2004	Cedrela, Teak
139	OAEK (Oduro Anane Ent.)	Ashanti Nkawie Jimira		Jimira	14	128	0.0	40.0	23rd March, 2004 22nd December, 2004?	Cedrela, Teak
	OAEK (Oduro Anane Ent.)	Ashanti	Nkawie	Jimira	38	128	0.0	45.0	2004	Cedrela, Teak
140	Osei Tutu (O.T) Brothers Ltd	Ashanti	Nkawie	Jimira	13	128	0.0	75.0	23rd January, 2004	Cedrela, Teak
141	SKOD Timbers	Ashanti	Nkawie	Jimira	22, 26, 30	384	0.0	5.0	5th October, 2004	Cedrela,Teak
142	TSL (Tepa & Techiman Sawmills Ltd)	Ashanti	Nkawie	Jimira	32	129.67	0.0	30.0	3rd June, 2004	Cedrela, Teak
143	Wood Pillar	Ashanti	Nkawie	Jimira	9	128	0.0	5.0	16th December, 2004	
144	Logwood Industries Limited	Ashanti	Nkawie	Jimira	33	128	0.0	4.0	2004	Cedrela, Teak
145	ADK Timbers Co. Ltd	Ashanti	Nkawie	Jimira Extension	18	128	0.0	44.0		Cedrela, Teak
146	Bibiani Logging and Lumber Company Limited	Ashanti	Nkawie	Jimira Extension	19,20,23,24	406.73	0.0	128.0		Cedrela, Teak
147	City View Company Ltd (CVC)	Ashanti	Nkawie	Jimira Extension	21	128	0.0	128.0	10th December, 2004	Cedrela, Teak, Ceiba (sparsely)
148	N&B Link Timber Company Limited	Ashanti	Nkawie	Jimira Extension	17, 20	256	0.0	49.0	8th June, 2004	Cedrela, Teak
149	Association for Conservation and Development (ASCODEV)	Ashanti	Offinso	Afram Headwaters	69	100	0.0	25.0	28th March, 2001	Teak
150	Ben 'O' Investments Ltd	Ashanti	Offinso	Afram Headwaters	5 124	50 129	0.0 0.0	50.0 50.0	18th March, 2005	Teak, Cedrela
151	Ehwia Wood Products Limited	Ashanti	Offinso	Afram Headwaters	33, 35 101	380	0.0	210.0	1996 2004	Teak, Cedrela
152	Evans Timbers Ltd	Ashanti Offinso Afram Headwaters		Afram Headwaters	107 108	205.99	0.0	100.0 70.0	9th August, 2001	Teak
153	GroTeak Aforestation Limited	Ashanti	Offinso	Afram Headwaters	74	128	0.0	40.0	2003	Teak
154	Hon. Baffour Kese-Amankwaa	Ashanti	Offinso	Afram Headwaters	106	128	0.0	0.0	8th March, 2013	N/A
155	JOJAYKO Enterprise	Ashanti Offinso Afram Headwa				205.61	20.0	52.0	4th November, 2012	Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
156	JOSANWI Enterprise Limited	Ashanti	Offinso	Afram Headwaters	92	118.053	0.0	118.1	13th August, 2001	Teak
157	Kwadkoff Co. Ltd	Ashanti	Offinso	Afram Headwaters	102	111.91	0.0	85.0	2003	Teak
158	Logwood Industries Limited	Ashanti	Offinso	Afram Headwaters	34	100	0.0	50.0	2003	Teak, Cedrela
159	Mere Plantations Limited	Ashanti	Offinso	Afram Headwaters	12-14,17-23,29-31,112- 114,116-118; 41,43,45,47,80-86,96- 100,104,105	4078.5	0.0	1172.5	5th February, 2010	Teak
160	Ben Dwomo	Ashanti	Offinso	Afrensu Brohuma	23,24,25,26	518.48	0.0	216.5		Teak
161	Diaby Leasing Company Limited	Ashanti	Offinso	Afrensu Brohuma	9,10	279.72	0.0	135.0	7th Jan. 2004 21st March, 2010	Teak
162	Dwen Sie Limited	Ashanti	Offinso	Afrensu Brohuma	46	131.2	40.0	40.0	19th March, 2008	Teak
163	FORM Ghana Ltd	Ashanti	Offinso	Afrensu Brohuma	8,12,19,20,21,22, 27,28,29,32,33,34,35	1778.129	0.0	1778.1	1st September, 2012?	Teak, Ceiba, Mahogany, Albizia, Ofram, Emire, Kola, Kokrodua, Potradom
164	HABITAT TIMBERS	Ashanti	Offinso	Afrensu Brohuma	48	125	0.0	100.0		
165	Michael Larbi	Ashanti	Offinso	Afrensu Brohuma	47	124.43	10.0	100.0	16th March, 2010	Teak
166	Next Door Farms	Ashanti	Offinso	Afrensu Brohuma	49	126.141	66.0	116.0		Teak
167	SUNSTEX	Ashanti	Offinso	Afrensu Brohuma	11, 12, 14, 15, 17, 41, 42A, 42B, 43, 44, 45A, 45B, 50A, 51A, 52A, 53, 55, 56	2200	0.0	237.0		Teak
168	Unity Afforestation and Tree Nursery Project	Ashanti	Offinso	Afrensu Brohuma	30, 31	248.701	43.0	248.7	5th March, 2005	Teak
169	Ahmed Suleman Farms & Company Limited	Ashanti	Offinso	Asubima	15, 16, 17, 18, 19, 24,25,26	1128.27	100.0	931.0		Teak, Cassia
170	* Colonel R.K Opoku Adusei	Ashanti	Offinso	Asubima	56	100	0.0	50.0	20th February, 2006	Teak
171	Form Ghana Ltd	Ashanti	Offinso	Asubima	1,2,3,4,5,6,7,8,9,10, 11,12,13,27,28	1776.498	0.0	1776.5	30th Oct. 2007	Teak, Ceiba, Mahogany, Albizia, Ofram, Emire, Kola, Kokrodua, Potradom
172	Suleman Twi Farms	Ashanti	Offinso	Asubima	61, 62	270.16	0.0			
173	Aawess Foundation	Ashanti	Offinso	Asufu East	7	126.75	104.0	104.0	27 th January, 2014	Teak, Ofram
174	International Seed Centre	Ashanti	Offinso	Asufu East	8	128	0.0	30.0	2002	Teak, Cedrela
175	Kwaku Poku Timbers Ltd	Ashanti	Offinso	Asufu East	4,5	255.27	5.0	200.0	7th January, 2004	Teak, Cedrela
176	Nkunim Ventures	Ashanti	Offinso	Asufu East	6	135	0.0	135.0		Teak, Ofram, Wawa
-					18	128	50.0	50.0	4th September,	
177	Offin Timbers & Construction Co. Ltd (O.T.C.C)	Ashanti	Offinso	Asufu West Shelterbelt	19	128	5.0	35.0	4th September, 2003	Teak, Cedrela
178	Sarbeng Limited	Ashanti	Offinso	Asufu West	16	128	0.0	70.0	10th September, 2004	Teak, Cedrela
					17	128	40.0	40.0	13th January, 2004	
179	Adu - Gyamfi Farms	Ashanti	Offinso	Kwamisa	55	141.45	0.0	141.5	24 December, 2001	Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
180	Aidoo Ntim Farms	Ashanti	Offinso	Kwamisa	54	154.04	0.0	60.0	24 December, 2001	Teak
181	ASA-BEA Enterprise	Ashanti	Offinso	Kwamisa	24	125.445	10.4	125.4	1st April, 2008	Teak
182	Asante Wiredu & Associates	Ashanti	Offinso	Kwamisa	2	150.172	0.0	150.2	8th January, 2004	Teak
183	Asantewaa Enterprise Limited	Ashanti	Offinso	Kwamisa	52 34	257.764	0.0	246.0	31st December, 2002 8th January, 2004	Teak
184	Asotia Boakye Company Limited	Ashanti	Offinso	Kwamisa	39	129.4	29.4	129.4	10th January, 2005	Teak
185	Assakyiri Timbers and Wood Products	Ashanti	Offinso	Kwamisa	56	128	0.0	30.0	26th March, 2003	Teak
186	William K. Asumadu & Margaret A. Kwabia	Ashanti	Offinso	Kwamisa	30	112.15	10.0	73.0	·	Teak
187	B.Y Ofori Frimpong	Ashanti	Offinso	Kwamisa	20	161.954	0.0	29.6	24th February, 2009	Teak
188	Boadu Ayeboafo Plantations	Ashanti	Offinso	Kwamisa	46	136.21	0.0	110.0	20th December, 2002	Teak
189	Bonfrim Business Services	Ashanti	Offinso	Kwamisa	51	133.162	0.0	133.2	20th December, 2002	Teak, Cedrela
190	Charles Amankwah	Ashanti	Offinso	Kwamisa	44	129.138	5.1	129.1	7th November, 2007	Teak
191	Classic Farms Co. Ltd	Ashanti	Offinso	Kwamisa	48	120.201	0.0	118.0	16th May, 2005	Teak
192	CWC Ventures Limited	Ashanti	Offinso	Kwamisa	49	114.931	0.0	114.9	1st September, 2005	Teak
193	D&G Consults	Ashanti	Offinso	Kwamisa	40	168.027	0.0	168.0	25th October, 2007	Teak
194	Zypher Consult	Ashanti	Offinso	Kwamisa	43	130.207	0.0	120.0		Teak
195	Eghan & Eghan Investments Limited	Ashanti	Offinso	Kwamisa	57	149.53	0.0	149.5	21st December, 2011 10th January, 2005	Teak
196	EL-SARP Unique Company Limited	Ashanti	Offinso	Kwamisa	47	100	0.0	100.0	20th December, 2002	Teak
197	Europe Auto and Europe Farms Ltd	Ashanti	Offinso	Kwamisa	36, 37	260.435	0.0	260.4	8th January, 2004	Teak, Emire, Ofram, Tweapia
198	Faustina Kusi Timber Co. Ltd	Ashanti	Offinso	Kwamisa	42	128	0.0	80.0	20th January 2004	Teak
199	Florart Ventures Limited	Ashanti	Offinso	Kwamisa	18	178.23	0.0	103.0	10th January, 2005	Teak
200	Gorbros Ventures	Ashanti	Offinso	Kwamisa	50	162.17	0.0	100.0	24th December, 2002	Teak, Cedrela
201	Hon. Andrews Adjei Yeboah	Ashanti	Offinso	Kwamisa	32	86.522	0.0	50.0	Aug-08	Teak, Cedrela
202	Isaac Opoku Boateng	Ashanti	Offinso	Kwamisa	3	120	0.0	85.0	6th January, 2004	Teak
203	JOB CONSTRUCT Ghana Ltd	Ashanti	Offinso	Kwamisa	22	96.992	0.0	97.0	20th February, 2006	Teak
204	KAP Farms Enterprise Limited	Ashanti	Offinso	Kwamisa	33, 61	208.794	0.0	208.8	8th January, 2004, 31st December, 2002	Teak
205	Ken Boat	Ashanti	Offinso	Kwamisa	59	128	0.0	100.0		Teak
206	Kingsley Agyei Agyekum	Ashanti	Offinso	Kwamisa	23	128	0.0	41.0	25th October, 2007	Teak
207	Kwadukoff Co. Ltd	Ashanti	Offinso	Kwamisa	19	119.254	0.0	100.0		Teak
208	Orans Life Ltd	Ashanti	Offinso	Kwamisa	35,41	175.605	0.0	160.0	6th January, 2004	Teak

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
209	Osei Agyemang Badu	Ashanti	Offinso	Kwamisa	58	163.37	0.0	163.4	8th January, 2008	Teak, Ofram
210	OTK Farms	Ashanti	Offinso	Kwamisa	26	89.11	0.0	89.1	2/1/2007	Teak
211	Paul Kwasi (P.K) Forson	Ashanti	Offinso	Kwamisa	38	129.548	0.0	129.5	7th January, 2004	Teak, Cedrela plus one indigenous
212	SENS PROGRAM	Ashanti	Offinso	Kwamisa	25	128	20.0	70.0	23rd January, 2006	Teak
213	Soak Farms & Trading Ent	Ashanti	Offinso	Kwamisa	53, 60	253.206	0.0	253.2	31st December, 2002	Teak
214	Vicalex Crafts Ltd	Ashanti	Offinso	Kwamisa	45	128	9.0	42.0	10th April, 2003	Teak
215	ANTICO Wood Processing Limited	Ashanti	Offinso	Mankrang	30	121.045	0.0	70.0	11th December, 2002	Teak
					29	136.471			17th February, 2004	
216	BODUKWAN Farms	Ashanti	Offinso	Mankrang	8-14, 19-22, 26-28, 54, 50-55, 60	2548		0.0	17th January, 2013	
217	Camba Timbers	Ashanti	Offinso	Mankrang	15	130	0.0	30.0		Teak, Cedrela
218	Esaase Wood Products Limited	Ashanti	shanti Offinso Mankrang		47	100	0.0	120.0	20th January, 2003	Teak, Cedrela
				-	46	50			28th January, 2004	
219	Global Bamboo Products Ltd	Ashanti	Offinso	Mankrang	39	126.785	0.0	30.0	8th Jan. 2003	Bamboo, Teak
220	K.A.G Timbers Limited	Ashanti	Offinso	Mankrang	4	139.72	0.0	123.0	20th January, 2003	Teak, Cedrela
221	Nation Builders' Limited	Ashanti	Offinso	Mankrang	24	100	0.0	100.0	8th January, 2003	Teak
222	Roy C Company Ltd	Ashanti	Offinso	Mankrang	3,6	384	0.0	75.0	31st December, 2002	Teak
223	Unity Afforestation and Tree Nursery Project	Ashanti	Offinso	Mankrang	Portions of 1, 15, 57 & 58	214.619	0.0	214.6	8th January, 2004	Watapuo, Kyenkyen, Gmelina, Albizia, Mahogany, Wawa, Ofram, Teak, Cedrela
224	Ebenezer Amarkwei Laryea	Ashanti	Offinso	Opro River	95	141.429	0.0	0.0	8th July, 2013	N/A
225	Evans Timbers Ltd	Ashanti	Offinso	Opro River	19, 22, 73 74	360 128	0.0	110.0 128.0	2002 2005	Teak
226	Grow Forest Ltd	Ashanti	Offinso	Opro River	97	116.72	0.0	0.0	2005 20th February, 2013	N/A
227	Iron Masters Company Ltd	Ashanti	Offinso	Opro River	92	129.82	20.0	20.0	5th February, 2013	Teak
228	JOB CONSTRUCT Ghana Ltd	Ashanti	Offinso	Opro River	91	117.563	0.0	50.0	5th February, 2013	
229	Joe Sala Sawmill Ltd	Ashanti	Offinso	Opro River	93,94	244.772	20.0	240.0	31st December, 2002	Teak, Ofram, Mahogany, Cedrela
230	J.Y.V Co. Ltd	Ashanti	Offinso	Opro River	96	121.96	0.0	0.0	8th February, 2013	N/A
231	Kwame-Bi Kuffour Timber Co. Ltd	Co. Ltd Ashanti Offinso Opro R		Opro River	98	150.913	16.0	81.0	11th August, 2003	Cedrela

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
232	Greenfields Plantations Limited/Ayum	Brong Ahafo	Bechem	Bosomkese	16-20, 49A & 49B	806	0.0	422.0		Cedrela, Ceiba, Mansonia, Ofram, Utile, Mahogany, Wawa, Otie, Odum, Kusia, Kokrodua
233	Greenfields Plantations Limited/Ayum	Brong Ahafo	Dormaa	Mpameso	3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 25, 26, 27, 180, 181, 182, 183, 184, 214, 215, 223, 224, 225, 226, 227, 228, 229, 229A, 240, 241, 242, 243, 244, 245, 246, 247, 248	4992	0.0	1010.5		Cedrela, Ofram, Mahogany, Edinam, Wawa, Emire, Kyenkyen, Utile, Mansonia, Otie, Kokrodua, Onyina, Senna siamea
234	Adadex Farms	Brong Ahafo	Dormaa	Pamu Berekum	24, 25	256	0.0	0.0	23rd May, 3014	
235	Adams Farms	Brong Ahafo	Dormaa	Pamu Berekum	69	142.9	0.0	80.0	25th January, 2005	Teak
236	Agyakwa Anyane & Charity Timbers	Brong Ahafo	Dormaa	Pamu Berekum	96	50	0.0	10.0	10th May, 2005	Teak
237	AKABELS Enterprise	Brong Ahafo	Dormaa	Pamu Berekum	134	100	0.0	50.0	24th December, 2002	Teak
238	Akua Afriyie	Brong Ahafo	Dormaa	Pamu Berekum	64,65,66,67	500	0.0	40.0	2002	Teak
239	Alexander Takyi Timbers Sawmills (ATTS)	Brong Ahafo	Dormaa	Pamu Berekum	50, 55, 56, 62,63	640	0.0	185.0	29th January, 2001	Teak
240	Arthur Farms	Brong Ahafo	Dormaa	Pamu Berekum	124	120	0.0	5.0	23rd January, 2007	Teak
241	* Asoma & Family Plantation	Brong Ahafo	Dormaa	Pamu Berekum	71	106.48	0.0	5.0	2001	Teak
242	Asuowam Complex	Brong Ahafo	Dormaa	Pamu Berekum	86,87,88,100	480	0.0	100.0	25th January, 2001	Teak
243	ATBED Company Limited	Brong Ahafo	Dormaa	Pamu Berekum	91	125	0.0	80.0	7th May, 2004	Teak
244	Baah (Abena Kwabena)	Brong Ahafo	Dormaa	Pamu Berekum	40,41,46,47,53	740	0.0	60.0	2004	Teak
245	Baffour Asamoah & Sons	Brong Ahafo	Dormaa	Pamu Berekum	130	130	0.0	30.0	8th January, 2004	Teak
246	Concerned Citizen Delta-Kaay Ltd & REMOCGE (Resource and	Brong Ahafo Brong Ahafo	Dormaa Dormaa	Pamu Berekum Pamu Berekum	21 131, 132	57.87 500	0.0	27.0 150.0	26th March, 2001 9th April, 2001	Teak Teak
248	Mobilisation Centre for Global Emergencies) Dormaa Forestry International (Global Green)	Brong Ahafo	Dormaa	Pamu Berekum	5, 6, 7, 8, 19, 20 Portions (9, 12, 13, 18, 80)	1628.546	0.0	240.0	28th February, 2001	Teak
249	FC/Industry Plantation Development Fund Committee	Brong Ahafo	Dormaa	Pamu Berekum	92, 93, 94, 95, 96, 97, 98, 106, 107, 108, 109, 119, 120, 121, 122	1997	0.0	0.0	26th August, 2014	N/A
250	ZOIL Services Limited	Brong Ahafo	Dormaa	Pamu Berekum	97,98,99, 124	1000	0.0	0.0	2014	
251	Hon. Yaw Afful	Brong Ahafo	Dormaa	Pamu Berekum	123	128	0.0	12.0	2005	Teak
252	JOWAK Enterprise Limited	Brong Ahafo	Dormaa	Pamu Berekum	113, 128	263	0.0	165.0	29th January, 2001	Teak
253	Kyma Plantations	Brong Ahafo	Dormaa	Pamu Berekum	136	200	0.0	60.0	22nd March, 2007	Teak
254	Mireku Complex Limited	Brong Ahafo	Dormaa	Pamu Berekum	111	105	0.0	0.0	2012	-
255	Morricom Company Limited	Brong Ahafo	Dormaa	Pamu Berekum	135	259.7	0.0	79.7	7th January, 2004	Teak
256	Nana Kordie Yeboah II (Dormaa Aduanahene)	Brong Ahafo	Dormaa	Pamu Berekum	37	100	0.0	0.0	2012	-

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
257	Oboade Farms	Brong Ahafo	Dormaa	Pamu Berekum	38	128	0.0	0.0	14th October, 2013	-
258	Ohenba K.D. Foundation	Brong Ahafo	Dormaa	Pamu Berekum	43	50	0.0	20.0	8th January, 2004	Teak
259	Omanba Solutions Ltd	Brong Ahafo	Dormaa	Pamu Berekum	125	128	0.0	3.0	16th April, 2013	Teak
260	Original Asase Aban Complex Limited	Brong Ahafo	Dormaa	Pamu Berekum	82, 83	100	0.0	8.0	9th January, 2003	Teak
261	Osagyefo Oseadeyo Agyeman Badu II (Dormaahene)	Brong Ahafo	Dormaa	Pamu Berekum	33, 34	186.95	0.0	40.0	10th February, 2012	Teak
262	Partners Sustainability Limited	Brong Ahafo	Dormaa	Pamu Berekum	118	128	0.0	10.0	21st June, 2006	Teak
263	Peggy Addai	Brong Ahafo	Dormaa	Pamu Berekum	44, 45	500	0.0	110.0	29th January, 2002	Teak
264	Peter Ansu Kumih Farms	Brong Ahafo	Dormaa	Pamu Berekum	75	120	0.0	11.0	10th March, 2005	Teak
265	Rosa Company Limited	Brong Ahafo	Dormaa	Pamu Berekum	70	128	0.0	70.0	1st February, 2002	Teak
266	Rural Forest Enterprise	Brong Ahafo	Dormaa	Pamu Berekum	23, 24	250	0.0	10.0	29th January, 2002	Teak
267	Sacred Heart Farms	Brong Ahafo	Dormaa	Pamu Berekum	76	120	0.0	9.0	10th March, 2005	Teak
268	Samartex Timber and PlyWood Company Limited	Brong Ahafo	Dormaa	Pamu Berekum	47, 48, 49, 50, 51, 52, 53, 54, 58, 59, 65	1463	0.0	0.0	27th August, 2014	N/A
269	Tuah Sawmills & Farms	Brong Ahafo	Dormaa	Pamu Berekum	25,26,27	309.94	0.0	100.0	13th January, 2003	Teak
270	Greenfields Plantations Limited/Ayum	Brong Ahafo	Sunyani	Amama	6B, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,17, 18, 19, 20, 21, 22, 23, 24	3255	0.0	3062.0		Cedrela, Ofram, Ceiba, Mahogany, Edinam, Wawa, Emire, Kyenkyen, Koto, Utile, Mansonia, Otie, Makore, Asanfina, Akasa, Odum, Kokrodua, Eucalyptus, Pine, Cassia, Mangium, Kusia
271	Greenfields Plantations Limited/ Scanstyle	Brong Ahafo	Sunyani	Asukese	33, 34, 43	450	0.0			
272	Greenfields Plantations Limited/Ayum	Brong Ahafo	Goaso	Bia Shelterbelt	9, 14	260	0.0	217.0	24th October, 2008	Wawa, Mahogany, Ofram, Pronoo, Kokrodua, Odum, Otie, Asanfena, Onyina etc
273	James Owusu Ansah	Brong Ahafo	Sunyani	Sawsaw	3	119.24	0.0	0.0	=	
274	Musco Asante Limited	Brong Ahafo	Sunyani	Sawsaw	8,9,10	384			3rd March, 2006	Teak
275	Atta Kruffi Enterprise	Brong Ahafo	Sunyani	Tain I	18,24,25	300	0.0	200.0	11th April, 2001	Teak
276	Franco Timbers	Brong Ahafo	Sunyani	Tain I	11, 12, 13, 14	561	0.0	561.0	25th January, 2001	Teak
277	Oti Yeboah Complex Limited (OYCL)	Brong Ahafo	Sunyani	Tain I	15, 20, 21, 22, 26, 27	533	0.0	329.0	14th June, 2001	Teak
278	Asuo Bomosadu Timbers & Sawmills Limited (ABTS)	Brong Ahafo	Sunyani	Tain II	12,14,15,16,17, 18,25,26,27, & Portion of 13 (Pruso) &163, 164, 165, 175, 176,177, 194, 195 & 196 (Namasua)	1991.56	0.0	293.9	21st September, 2005	Teak, Mahogany, Cedrela, Ofram, Ceiba, Emire

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
279	ATBED Enterprises	Brong Ahafo	Sunyani	Tain II	200, 223	250	0.0	0.0		
280	Form Ghana Ltd (PPP)	Brong Ahafo	Sunyani	Tain II	28-39, 42-92, 97, 98, 102-104, 107-129, 135- 140	14576	2119.0	2759.0	2013	Teak (dominant) Ceiba, Maho
281	Kwabena Kyeremeh Sawmill Ltd	Brong Ahafo	Sunyani	Tain II	324 & 325	256	0.0		2nd April, 2003	
282	Logs and Lumber Limited (LLL)	Brong Ahafo	Sunyani	Tain II	207, 208, 209, 210, 211, 215, 216, 217	1211.61	0.0	232.0	2006	Teak
283	Pacewood Company Limited	Brong Ahafo	Sunyani	Tain II	290, 291, 292, 308, 311	616.23	0.0	216.6	28th March, 2003	Teak
284	Royal Group Company Limited	Brong Ahafo	Sunyani	Tain II		400			13th March, 2001	
285	Sidakon Woods Limited	Brong Ahafo	Sunyani	Tain II	201,202,203	356	100.0	340.0	2011	Teak
286	Frim-Owusu Limited	Brong Ahafo	Sunyani	Tain Tributaries II	239	150	0.0	22.0	7th January, 2010	Teak
287	Messrs Tropical Agricultural Marketing and Consultancy Services	Central	Winneba	Yenku F/R, Block 'B'	5-26	432.79	0.0	0.0	9th February, 2010	
288	Atlantic Distribution	Eastern	Akim-Oda	Esen Epam	4,11	271.82	0.0	191.1	15th August, 2005	Cedrela, Ofram
289	CEPACOD (Center for Poverty Alleviation and Community Development)	Eastern	Begoro	Dede		150	0.0	0.0	20th December, 2002	
290	Mike Asaam (ACMA Group)	Eastern	Begoro	Southern Scarp	87-90, 93-95 (Ahinkwa)	179.51	0.0	100.0	29th January, 2001	Teak, Cedrela
291	Paul Dra Awittor (All Youth Farmers Association (NGO))	Eastern	Begoro	Southern Scarp	BP190, 191 &192	50.25	0.0	5.0	6th January, 2004	Cedrela
292	Apstar Enterprise	Eastern	Begoro	Southern Scarp	51, 53, 54, 56	323.42	0.0	144.0	9th January, 2004	Teak, Cedrela, Odum, Ceiba, Wawa, Ketreamfo, Ofram, Emire, Mahogany, Abeko, Osese, Odanhoma
293	Evergreen Club of Ghana	Eastern	Begoro	Southern Scarp	1	50	0.0	50.0		Teak, Cedrela, Ofram, Emire, Cassia
294	Forest Research Institute of Ghana (FORIG)	Eastern	Begoro	Southern Scarp	Ahinkwa Series (Close to Farm 14)	50	0.0	50.0	2000	Ofram, Emire
295	Forest Research Institute of Ghana (FORIG)	Eastern	Begoro	Southern Scarp	Apaa Series (2005-2006)	50	3.0	45.0	2000	Ofram, Emire
296	Health and Environmental Monitor	Eastern	Begoro	Southern Scarp	Pimpimso Taungya Series	50	0.0	40.0	1st March, 2003	Teak, Cedrela
297	Kajoa Farms	Eastern	Begoro	Southern Scarp	16	100	0.0	44.0		

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
298	Kasapreko Co. Ltd	Eastern	Begoro	Southern Scarp	FRBP 234-248	1000	0.0	300.0	26th February, 2003	Mahogany
299	Oda Sawmills/Plywood Veneer Co. Ltd	Eastern	Begoro	Worobong South	64,65	124	0.0	92.0	1st January, 2001	
300	OTK Farms	Eastern	Begoro	Worobong South	47, 48,52 (Portions)	13.07	0.0	13.1	25th January, 2006	Teak
301	Participatory Tropical Forest Development by Women in Indigenous Communities (PTFDWIC - 31st December Women's Movement)	Eastern	Begoro	Worobong South	FRBP 78-79	800	0.0	650.0	27th April, 2001	Emire, Ofram, Mansonia, Ceiba, Teak, Cedrela, Kyenkyen, Edinam
302	Trust Link	Eastern	Mpraeso	Southern Scarp		100	0.0	20.0	25th January, 2006	
303	BCS Limited	Eastern	Mpraeso	Northern Scarp	FRBP 42 and 44	50	0.0	0.0	21st April, 2006	
304	Ahanns Ghana Limited	Eastern	Mpraeso	Southern Scarp	Pillars 267 and 150	20	0.0	10.0	6th July, 2005	Teak, Cedrela
305	Ebenezer B.C Enterprise	Eastern	Mpraeso	Southern Scarp	Pillars 267 and 150	20	0.0	10.0	6th July, 2005	Teak, Cedrela
306	CFSL Farms	Eastern	Mpraeso	Worobong South		10	0.0	7.0	25th January, 2006	Teak
307	Collinsara & Sons	Eastern	Mpraeso	Southern Scarp	Dwerebease Series	20	0.0	10.0	27th February, 2008	
308	Feneboat Enterprise	Eastern	Mpraeso	Southern Scarp		50	0.0	35.0	2003	
309	Jet Sawmills Limited	Eastern	Mpraeso	Southern Scarp	Dwerebease Series	66.3	0.0	40.0		
310	Mosho Enterprise Limited	Eastern	Mpraeso	Southern Scarp	Pillars 267 and 150. Ntomeo	50	0.0	10.0	11th July, 2005	Teak, Cedrela
311	Mr. Yaw Baafi	Eastern	Mpraeso	Southern Scarp	FRBP 245 and 247				2006	
312	Sir Hokoe Ghana Ltd	Eastern	Mpraeso	Southern Scarp		50	0.0	25.0	6th January, 2003	Teak, Cedrela
313	Groman Company Limited	Eastern	Somanya	Volta River Block II	Ashitey? Wenchi?	120.52	4.4	8.8	16th July, 2009	Teak
314	Lordamn Ventures	Eastern	Somanya	Volta River Block I	N/A	100	0.0	40.0	14th March, 2007	
315	Odometa Agricultural Estates Limited	Eastern	Somanya	Volta Block I	Aboaborm/Bana	100	0.0	100.0	26th May, 2008	Teak
316	Thrive Enterprise	Greater Accra	Tema/Ada	Fiankonya	1-16	300	16.3	54.7	29th September, 2005	Mahogany, Eucalyptus, Silk Cotton
317	Alhaji Issaka Farms Ltd	Northern	Bole	Yerada		50	0.0		12th January, 2004	N/A
318	F A Advances	Northern	Bole	Yerada			0.0		14th May, 2012	N/A
319	Signum Ghana Limited	Northern	Bole	Yerada	183-323	16453	0.0	0.0	12th March, 2014	N/A
320	Jaksally Co. Ltd	Northern	Bole	Kenikeni		50	0.0		26th January, 2004	N/A
321	Jen Kurige Seidu Adamu	Northern	Bole	Kenikeni	N/A	50	0.0		26th January, 2004	N/A
322	Khanzan Wura (GH) Ltd	Northern	Bole	Kenikeni	N/A	50	0.0		9th January, 2004	N/A
323	Savanna Investment Limited	Northern	Bole	Kenikeni	N/A	100	0.0	0.0		N/A
	Jamal '55' Ventures	Northern	Buipe/Damongo	Damongo Scarp		49.63	0.0			N/A
325	Mrs. Esther Brenda Alhassan	Northern	Buipe/Damongo	Yakombo	842	68.69	0.0	0.0	7th May, 2014	N/A
326	Africoop	Volta	Nkwanta	Chai River	N/A	100	0.0	0.0		N/A
327	Messrs Noon Establishment (Nana Osei Broni)	Western	Bibiani	Anhwiaso East	30,34	32.85	0.0	12.1	2004	Cedrela
328	Samartex Timber and PlyWood Company Limited	Western	Aowin (Enchi)	Tano Nimire	50,51,52,53,54, 74,75,76,77	1405.6	71.0	351.0	3rd March, 2003	Cedrela, Mahogany, Ceiba, Emire, Ofram, Nyankom, Asanfena

NO.	COMPANY NAME	REGION	DISTRICT	FOREST RESERVE	COMPARTMENT/ SERIES	AREA ALLOCATED (Ha)	AREA PLANTED -2014 (Ha)	AREA PLANTED TO DATE (Ha)	DATE OF APPROVAL/ ALLOCATION	SPECIES PLANTED
329	JCM	Western	Juaboso-bia	Bia-Tawya			0.0	618.0	18th August, 1999	N/A
330	JCM	Western	Juaboso-bia	Manzan			0.0	257.3	18th August, 1999	N/A
331	John Bitar & Co. Limited	Western	Juaboso-bia	Manzan	Yamatwa, Kaase & Ahimakrom			531.7		Cedrela, Ofram, Otie, Asanfena
TOTAL						138,697.08	3,674.51	38,562.65		

SUMMARY OF AREA (Ha) OF SITES BURNT BY WILDFIRES (2010-2013)

REGION	FOREST DISTRICT		COUPE			Total
KEGION	TOREST DISTRICT	2010	2011	2012	2013	iotai
ASHANTI	Offinso				6	6
Brong Ahafo Eastern Gt. Accra Northern Upper West Upper East	Mankranso	4			2.5	
	Kumawu				35	35
	Mampong	8			9.8	17.8
		12	0	0	53.3	65.3
Brong Ahafo	Sunyani				9	9
	Kintampo	127.619	44	46.5		218.119
	Bechem			4		4
	Goaso		1.5			1.5
	Dormaa	30	_	45		75
		157.62	45.5	95.5	9	307.619
Eastern	Donkorkrom	48.3	1	11.6	5.7	66.6
	Mpraeso	34				34
	Somanya	45				45
	Begoro					0
	2 050.0	127.3	1	11.6	5.7	145.6
Gt. Accra	Tema	40	37		3	80
		40	37	0	3	80
Northern	Yendi	71.75	152.56	198.1	129.4	551.81
	Buipe	335	200	237	-	772
	Walewale	50.65	60.05	30.75	10.5	151.95
	Bole	135	94	198.32	100	527.32
	Tamale	37.95	150	176.88	70	434.83
		630.4	656.6	841.1	309.9	2437.91
Upper West	Lawra			16	5	21
	Tumu	161	31	46.96		238.96
		161	31	62.96	5	259.96
Upper East	Bolga	32	21		14	67
	Bawku	40				40
	Navrongo	786	251	94.2	25	1156.2
		858	272	94.2	39	1263.2
Volta	Но	131.6	21	11	0	163.6
	Denu	42.7	8.1	12.97	0	63.77
	Nkwanta				22	22
	Jasikan	46	7	144	19.5	216.5
	- 20000	220.3	36.1	168	41.5	465.87
			40-0	4 5 - 5		PAGE 422
Grand Total		2207	1079	1273	466.4	5025.459

																																		APPEI	NDIX IV
			PLAN	ITAIN	coco	DYAM	YAN	м	MA	AIZE	MILLE	т	SORG	ним	R	ICE		FOOD CRO ANS		SERVE +OFF PER	F RESERVE) TOM		CABE	BAGE	OH	(RO	CASSAV	Ά	ONI	ON	GARDE	N EGGS	WATER MELON	PAV	WPAW
REGION	toker Disker	durk	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	KEPOKTED AKEA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)		ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha) ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)
	Bibiani	2010 2011 2012 2013	0.0	0.0	0.0 0.0 39.5 0.0	0.0 0.0 79.3 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 52.0	0.0 0.0 88.4	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
Western	Juabeso	2010 2011 2012 2013	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
	Sefwi Wiawso	2010 2011 2012 2013	0.0 0.0 0.0 0.0 137.1	0.0 0.0 0.0 0.0 1055.4	0.0 0.0 0.0 0.0 39.5	0.0 0.0 0.0 0.0 79.3	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 52.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
	Winneba	2010 2011 2012 2013	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0		0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0		0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0		0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
	Cape coast	2010 2011 2012 2013	0.0 0.0 13.0 0.0	0.0 0.0 100.3 0.0	0.0 0.0 3.9 0.0	0.0 0.0 7.9 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 20.5 0.0	0.0 0.0 34.8 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 3.1 0.0	0.0 0.0 4.3 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0 0.0 0 0.0 0 0.0
Central	Assin Fosu	2010 2011 2012 2013	69.8	0.0 791.2 537.1	0.0 0.0 27.9 29.0	0.0 0.0 56.0 58.3	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 8.7 15.4	0.0 14.7 26.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
	Dunkwa	2010 2011 2012 2013	0.0 0.0 0.0	0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0	0.0
	TOTAL	2010	185.5 0.0	1428.6 0.0	60.8 0.0	0.0	0.0	0.0	44.5 0.0		0.0	0.0	0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	Tamale	2011 2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
		2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Buipe/Damong	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	
	0	2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		0.0
		2013 2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
Northern	Yendi	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northern		2012 2013	0.0	0.0	0.0	0.0	92.1 0.0	986.3 0.0	68.2 56.9		0.0 5.4	0.0 7.1	13.7 0.0	17.8 0.0	0.0		19.3 2.2				0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
		2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0						0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	Walewale	2012	0.0	0.0	0.0	0.0	5.4	57.8	99.9	169.8	37.1	48.2	0.0	0.0	0.0	0.0	13.6	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013 2010	0.0	0.0	0.0	0.0	0.0	21.4	62.5 0.0			37.7 0.0	0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	Bole	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2012 2013	0.0	0.0	0.0	0.0	0.0 5.9	0.0 63.4	0.0 3.0			0.0 61.6	0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	TOTAL	2010	0.0	0.0	0.0	0.0	0.0	1129.0 0.0	290.4 0.0			154.6 0.0	13.7 0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	Donkorkrom	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0
		2012 2013	0.0	0.0	0.0	0.0	0.0	42.1 0.0	3.4 0.0		0.0	0.0	0.0								0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
		2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0
	Somanya	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0 8.0		0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
		2013	0.0	0.0	0.0	0.0	0.0	0.0	11.4	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	Akim Oda	2012		238.1	7.1		0.0	0.0	5.3	9.0	0.0	0.0	0.0		0.0	0.0	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013 2014	120.4	927.1	34.7	69.8	0.0 10.6	0.0 113.6	58.0 23.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0
		2010			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0								0.0						0.0	0.0	0.0		0.0		0.0 0.0		
Eastern	Begoro	2011 2012			0.0	0.0	0.0	0.0	0.0			0.0	0.0								0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
		2013	49.0	377.5	24.4	49.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0
	Mpraeso	2010 2011			0.0	0.0	0.0	0.0	0.0			0.0	0.0							0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0		
	p. acso	2012			0.0	0.0	0.0	0.0 36.4	7.4			0.0	0.0								0.0	0.0	0.0				5.4 1.7	74.0 23.5	0.0	0.0	0.0	0.0	0.0 0.0		
		2013 2010	0.0	0.0	0.0	0.0	0.0	0.0	6.8 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

									MAIZE				SORGHUM RICE						PS (ON-RESERVE +OFF RE				CABBAGE									WATER MELON			
_{REGOT} A			PLANT		cocc		YA		_		MI	LLET		IM	RIC		_	INS	PEF		TOMATO	-			OKRO	CASS	AVA	ON	ION	_	N EGGS	_	LON	PAWP	AW
	_E OREST DEFINET	coure	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Hai	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	EBOBTED ABEA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)
	Kade	2012 2013	25.0 0.0	192.5 0.0	25.0 0.0	50.3 0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0 0		0.0 0.		0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Atebubu	2010 2011																																	
		2012 2013	4.0	30.8					5.5	9.3							6.0	8.4	8.0	52.0															
	TOTAL	2010	303.2 0.0	2334.5 0.0	91.2 0.0	183.3 0.0	17.9 0.0	192.1 0.0	123.5 0.0	209.9 0.0	0.0		0.0	0.0	0.0	0.0	15.3 0.0	21.4 0.0					0.0 0.		0.0 0.0 0.0 0.0	7.1 0.0			0.0 0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0
	Nkawie	2011	13.8	106.3	4.0	8.0	0.0	0.0	1.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2012 2013	142.4 0.0	1096.7 0.0	117.0 55.8	235.2 112.1	0.0	0.0	30.2 0.0	51.3 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
	Bekwai	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DERWAI	2012 2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0 0.		0.0 0.0 0.0 0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mampong	2011 2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0 10.0	0.0 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Ashanti		2013 2010	0.0	0.0	0.0	0.0	0.0	0.0	3.2 0.0	5.4 0.0	0.0		0.0	0.0	0.0	0.0	0.8	1.1 0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
	Offinso	2011 2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0 224.5	0.0 381.6	0.0		0.0	0.0	0.0	0.0	0.0 34.3	0.0 48.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
		2013 2010	0.0	0.0	0.0	0.0	12.4 0.0	132.8 0.0	176.9 0.0	300.8	0.0	0.0	0.0	0.0	0.0	0.0	5.4 0.0	7.6 0.0	0.0	0.0	3.0 22	.4 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Juaso	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2012 2013	123.1 117.5	948.2 904.8	51.9	16.0 104.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
	Kumawu	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
		2012 2013	102.1 41.3	786.5 318.3	0.0	0.0	14.6 0.0	156.3 0.0	29.2 2.6	49.6 4.4	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
		2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	New Edubiase	2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013 2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Bekwai	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	2013	0.0 540.4	0.0 4160.7	0.0 236.7	0.0 475.7	0.0 27.0	0.0 289.1	0.0 477.5	0.0 811.8	0.0		0.0	0.0	0.0	0.0	0.0 40.5	0.0 56.8			0.0 0 3.0 22		0.0 0.		0.0 0.0 0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
		2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0 0		0.0 0.		0.0 0.0 0.0 0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kintampo	2012 2013	0.0 7.9	0.0 60.9	0.0	0.0	0.0	0.0	0.0 63.1	0.0 107.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0 17.5	0.0 24.6	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 C	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Sunyani	2011 2012	0.0 15.7	0.0 121.0	0.0 29.8	0.0 59.9	0.0 20.6	0.0 220.5	0.0 160.7	0.0 273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0 15.2	0.0 21.3	14.8	96.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013 2010	7.5 0.0	57.4 0.0	4.1 0.0	8.2 0.0	0.0	0.0	93.0 0.0	158.1 0.0	0.0		0.0	0.0	0.0	0.0	12.0	16.8 0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Brong Ahafo	Bechem	2011 2012	0.0 13.3	0.0 102.8	0.0 2.4	0.0 4.7	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
		2013 2010	21.1	162.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
	Dormaa	2011 2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013	0.0	0.0	0.0	0.0	3.8	41.0	99.3	168.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.0	0.0	0.0 0	.0 C	0.0	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Goaso	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2012 2013	70.4	0.0 542.3	0.0 31.1	0.0 62.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0 0.		0.0 0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	2010	140.0 0.0	1077.9 0.0	67.3 0.0	135.3 0.0	24.4 0.0	261.5 0.0	421.5 0.0	716.6 0.0	0.0		0.0	0.0	0.0	0.0	51.3	71.8 0.0			0.0 0		0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Bolgatanga	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0 57.2	0.0 97.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0 17.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2013	0.0	0.0	0.0	0.0	0.0	0.0	33.8	57.5	18.4	24.0	0.0	0.0	0.0	0.0	9.2	12.9	0.0	0.0	0.0	.0 0	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Navrongo	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0. 0.0 0.	.0	0.0 0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Upper East		2012 2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Davida:	2010 2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0					0.0 0.		0.0 0.0	0.0					0.0	0.0	0.0	0.0	0.0
	Bawku	2012 2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0 0.	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.0	0.0	0.0	0.0	91.0	154.7	79.8	103.7	0.0	0.0	0.0	0.0	26.2	36.7	0.0	0.0	0.0	.0 0	.0 0.	.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	I	2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0 0	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

																		FO	OD CROPS	(ON-RESI	RVE +OFF R	RESERVE)															i.
				PLAN	TAIN	coco	YAM	YA	M	MA	AIZE	MII	LLET	SORGI	IUM	RI	CE	BEAN	IS	PEPP	ER	TOMA	то	CABBA	AGE	ОКІ	RO	CASS	AVA	ON	ION	GARDE	N EGGS	WATER N	MELON	PAWPAW	İ
_{nt} eath	_E ORET DISTRI	ş¢ (Coupé	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha)	ESTIMATED PRODUCTION (Mt)	REPORTED AREA (Ha) ESTIMATED PRODUCTION (Mt)															
	Lawra		2011	0.0	0.0	0.0	0.0	0.0		0.0					0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	
			2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Upper West			2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		63.7	89.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0	
	Tumu		2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0	
			2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	-
			2012	0.0	0.0	0.0	0.0	0.0		38.0	64.6	0.0	0.0	0.0	0.0	0.0		35.8	50.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
			2013	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
	TOTAL			0.0	0.0	0.0	0.0	0.0		38.0	64.6	0.0	0.0	0.0	0.0	0.0		99.5	139.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0				0.0	0.0	0.0 0.0	
	Amasaman	<u> </u>	2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0 0.0	
		an	2011	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0 0.0	
			2012	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	-
Greater			2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
Accra		-	2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0 0.0	
	Tema	-	2011	0.0					0.0											0.0									0.0				0.0				-
		-	2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
	TOTAL		2013	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0 0.0	
	TOTAL		2010	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.0	0.0	0.0 0.0	
			2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0 0.0	
	Jasikan	1	2011	0.0	0.0	0.0	0.0	0.0		1.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
			2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
			2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0 0.0	
			2010	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
Volta	Ho		2012	0.4	3.1	0.0	0.0	0.0	0.0	12.5		0.0	0.0	0.0	0.0	0.0		3.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	-
			2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
			2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
			2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	-
	Nkwanta	:a	2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
			2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0 0.0	
	TOTAL			0.4		0.0	0.0	0.0		13.5		0.0		0.0	0.0	0.0		3.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0					0.0	0.0 0.0	
	1					,						10					2.3												-,0								