



Private Use Permit  
Contract  
Between The  
Forestry Development  
Authority

&

*The People of  
Kokoyah District,  
Bong County*

F.D.A.

P.O. Box 10-3010

Whein Town, Mount Barclay

1100, Monrovia 10 Liberia

May, 23, 2011





REPUBLIC OF LIBERIA)  
MONTERRADO COUNTY)

**PRIVATE USE PERMIT CONTRACT BETWEEN THE FORESTRY DEVELOPMENT AUTHORITY AND THE PEOPLE OF KOKOYAH ADMINISTRATIVE DISTRICT, FOR HARVESTING OF 21,549 HECTARES OF FORESTLAND LOCATED IN BONG OUNTY, REPUBLIC OF LIBERIA**

THIS CONTRACT made and entered into this 23<sup>rd</sup> day of May A.D. 2011, by and between the Government of Liberia, through the Forestry Development Authority, hereinafter referred to as the **Authority**, represented by its Managing Director, Moses D. Wogbeh Sr. and the People of Kokoyah Administrative District, Bong County, hereinafter referred to as **Kokoyah**, represented by the Group of Forestry Experts Company (GOFEC) by and thru Aylmer B. Johnson, I., hereinafter collectively referred to as the Parties, hereby;

**W I T N E S S E T H:**

**WHEREAS**, the Authority is statutorily responsible for the sustainable management and use of all categories of forest resources;

**WHEREAS**, the Citizens of Kokoyah Administrative District, Bong County, above described, are legitimate and bonafide owners of an aggregated land mass of 53248acres/21,549 hectares of forested land by virtue of inheritance through a legitimate purchase from the Republic of Liberia;

**WHEREAS**, by virtue of Section 5.6 (d) (i) of the National Forestry Reform Law (NFRL) of 2006, copy of a set of duly certified Public Land Sale Deed issued under the signature of President Edwin J. Barclay on March 20, A.D. 1934 in proof of ownership of the subject aggregated tract of land is hereto attached and marked Exhibit "A" in bulk to form a cogent part of this contract;

**WHEREAS**, in further verification of the subject property, the Ministry of Lands, Mines & Energy finally gives authentication and verification to the said Teemor Chiefdom Deed through a letter under the signature of Acting Assistant Minister Maxwell C.F. Gwee. Attached also is the said verification letter marked Exhibit "B" to form an integral part of this Contract;

**WHEREAS**, citizens including elders and youths of the above named Kokoyah Administrative District, through the Office of the Paramount Chief, and endorsed by the Superintendent of Bong County, Hon. Rennie B. Jackson, have given their **written consent** to the appointment and selection of the Group of Forestry Experts Company (GOFEC) by and thru Aylmer B. Johnson, I. as their Representative and Legal Agent to act in their behalf for the sustainable management of their forest resources. The said Instrument of Authorization in favor Group of Forestry Experts Company (GOFEC) from

MJW

the citizens of Kokoyah Administrative District Chiefdom is hereto attached and marked Exhibit "C" to form an integral part of this Permit.

**WHEREAS**, validation of the area in keeping with Section 5.6 (d) (ii) of the NFRL and Section 61 of FDA Regulation 102-07 shows that the said tract of land is un-encumbered and does not overlap with any forestry designated land use. Said validation/prospection report is hereto attached and marked Exhibit "D" forming also an integral part of this contract;

**WHEREAS**, **Kokoyah** is desirous of commercializing harvestable tree species on the said accumulative tract of 53,248 acres/21,549 hectares of land;

**WHEREAS**, the Authority having examined **Kokoyah's** application and the requirements of Section 5.6 of the NFRL having been met, declares **Kokoyah** qualified for the issuance of a Private Use Permit that will allow it enter into contractual agreement with any company or corporation to carry out said commercial activities; and

**NOW, THEREFORE**, for and in consideration of the mutual promises and agreements herein contained, the parties do hereby agree as follows:

1. Definitions

- a. Authority: The Forestry Development Authority (FDA) created by an Act of the Legislature on November 1, 1976.
- b. Annual Operations Plan: the plan that guides the annual operations of the Holder
- c. Chain of Custody: the path of custodianship followed by logs, Timber and wood products through harvesting, transport, interim storage, processing, distribution and export from source of origin in the forest to end use.
- d. Code of Forest Harvesting Practices: a set of standards for environmentally sound forest use prepared by the Authority
- e. Conservation: the sustainable management and protection of forest resources to achieve maximum environmental, social, economic and scientific benefits for present and future generations
- f. Forestry: the science, art and practice of conservation of forest resources
- g. Forest Resources License: any legal instrument pursuant to which the Authority allows a person, subject to specified conditions, to extract forest resources or make other productive and sustainable use of forest land. This includes Forest management Contracts, Timber Sale Contracts, Forest Use Permit and Private Use Permit.

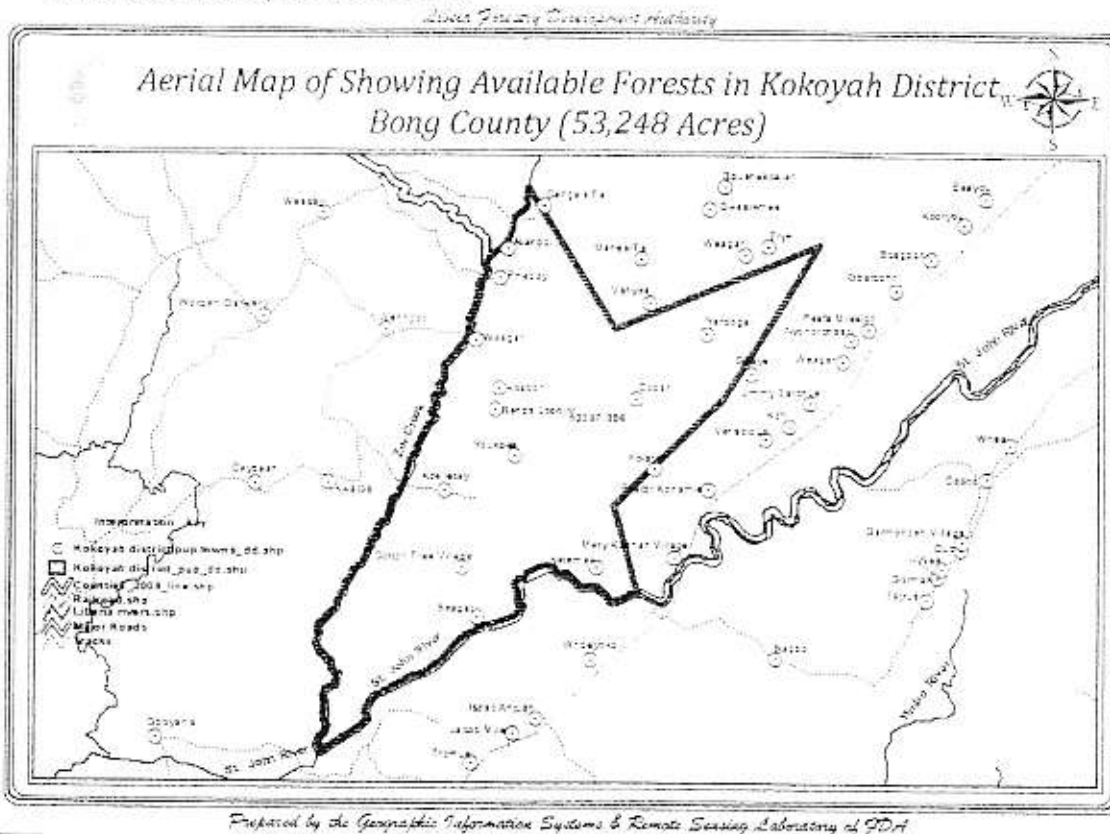
- h. Forestland: a tract of land, including its flora and fauna capable of producing forest resources, or land set aside for the purpose of forestry, but not including land in permanent settlements and land that has been in long term use for non-shifting cultivation of crops or raising livestock.
- i. Forest Product: any material or item derived from forest resources.
- j. Forest Management Contract: forestry contract which covers a land area of 50,000 – 400,000 hectares.
- k. Holder: a person who holds a valid forest resources license
- l. Land Owner: a person who owns land by legal title
- m. Operator: a person harvesting or making commercial use of forest resources under a forest resources license, including a person working as an employee, contractor or other agent for a Holder.
- n. Pre-Felling Operations: legal requirements of the Holder before felling of logs. They include posting of required performance bond; preparation of initial annual operations plan and preparation of environmental impact assessment.
- o. Private Use Permit: a forest resource license issued by the Government to allow commercial use of the forest resources on private land.
- p. Public Use Permit: a forest resource license issued to extract forest resource from an area less than 1000 hectares.
- q. Reforestation: the establishment of a tree plantation in a previously forested area that has been affected by cutting, fire, or some other act of tree removal.
- r. Societe Generale de Surveillance (SGS): the institution/company responsible to manage the Chain of Custody System.
- s. Timber Sale Contract: a short term forest resources license issued by the Government for a period of three (3) years that allows a person to harvest timber from a specified tract of forest land.

## 2. Metes and Bounds/Technical Description of Kokoyah Forest Land & Map

Kokoyah District forest land area lies within Latitudes  $6^{\circ}20'0''$  -  $6^{\circ}24'0''$  North of the equator and Longitudes  $9^{\circ}30'0''$  -  $9^{\circ}36'0''$  West of the Greenwich meridian and it is located in Bong County-LIBERIA

The boundary line of Kokoyah forested area commences at a point marked on the surface of the Earth Lat/Long ( $6^{\circ}24'12.56''$  N- $9^{\circ}39'58.14''$ W), thence a line runs along the Saint John River in the northern direction for 21,039 meters to a point ( $6^{\circ}28'12.70''$ N- $9^{\circ}32'05.11''$ W); thence a line runs N  $16^{\circ}$  W for 4,222 meters to a point; thence a line runs N  $45^{\circ}$  E for 6,990 meters to a point; thence a line runs N  $32^{\circ}$  E for 8,408 meters to a point; thence a line runs S  $67^{\circ}$  W for 10,106 meters to a point; thence a line runs N  $31^{\circ}$  W for 7,720 meters to the point on the Zor River; thence a line runs along the Zor River in the southern direction for 30,506 meters to the place of commencement (CONFLUENCE OF ZOR & ST. JOHN), embracing 21,549 hectares of land and NO MORE.

## 3. Map of Kokoyah Forestland



## 4. Contract Objective

- a. To harvest merchantable tree species from 21,549 hectares of tract of land otherwise called the Kokoyah Forest Land

MAM

- b. To engage in reforestation of the area involving indigenous species
- c. To create alternative uses of the tract of land after harvesting of trees
- d. To create employment for about 250 locals of the contract area and surrounding towns and villages.

5. **Contract Duration**

The contract shall be for thirteen (13) years.

6. **Chain of Custody System**

In keeping with Section 13.5 of the National Forestry Reform Law of 2006 and sections (1-35) of FDA Regulation 108-07, the Chain of Custody System will apply during the life and implementation of this contract. The system so established for the tracking of logs, timber and wood products from forest to processing and then to domestic or foreign market shall be managed by Societe Generale de Surveillance (SGS) using SGS/Helveta equipment and software as provided for by section 3.2 (3) of the Chain of Custody System Management Contract of 2007.

7. **Land Rental & Stumpage Tax**

Consistent with Section 5.7(b) of the National Forestry Reform Law of 2006, the Company shall not be charged to pay land rental tax. However, stumpage shall be paid consistent with Section 5.7 (c) of the National Forestry Reform Law and also consistent with Section 22(b) of Regulation 107-07.

8. **Other Fees & GOL Taxes**

All other fees and GOL Taxes levied on the project shall be consistent with the Revenue Law of Liberia and FDA Regulation.

9. **Pre-felling Date**

Before Company is certified for felling, all pre-felling operations including the following must be completed:

- a. Posting US\$50,000.00 performance bond
- b. Submission of initial annual operations plan
- c. Environmental Impact Assessment
- d. Social Agreement

10. **Employment**



Recruitment and employment by the Company shall be consistent with Labor Law of Liberia and International Labor Organization.

#### **Termination**

This contract shall be terminated if the company upon notice of breach of any term of this Contract fails to remedy said breach within a period of (60) sixty days.

9.

#### **Force Majeure**

In the event of force majeure, which causes either party from meeting its obligations herein stated, the Contract shall be suspended as long as the force majeure continues.

10.

#### **Duty of Care**

The Authority shall ensure that the Company maintains environmental quality of the cutting area and comply with all other conditions consistent with the Liberia Code of Harvesting Practices to include:

- a. Water course protection
- b. Erosion prevention
- c. Prevention of pollution to rivers, streams and other waterways by disposal of wastes
- d. Prevention of fire disaster

The operation shall also be in conformity with international conventions to which Liberia is a party. They include: the Convention on Biodiversity, the International Tropical Timber Agreement, the United Nation Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, the Convention on International Trade in Endangered Species and the RAMSAR Convention on Wetland Management

11.

#### **Governing Laws**

In effecting this Contract between the Corporation and the Authority, the relevant Laws of Liberia including but not limited to the National Forestry Reform Law and regulation governing Chain of Custody will prevail.

12.

#### **Binding Effect**

This Agreement is binding on the parties, their successors-in-office as if they were physically present at execution of this instrument.

In witness whereof, we have affixed our signatures on the day and date first mentioned above.

**FOR THE AUTHORITY**

*[Signature]*  
Witness

Approved: *[Signature]*  
*Moses D. Wogbeh, Sr.*  
Managing Director

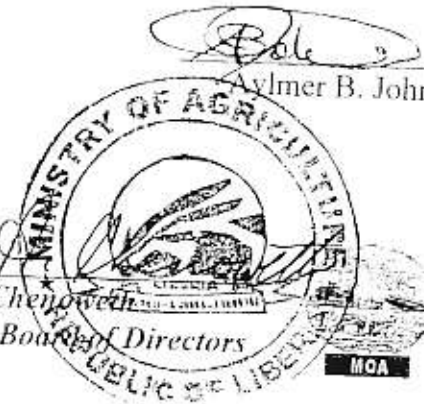


**FOR THE CITIZENS OF KOKOYAH ADMINISTRATIVE DISTRICT**

*A. Collins*  
Witness

*[Signature]*  
Aylmer B. Johnson, I.

Approved *Florence*  
*Florence Chenoweth*  
Chairman-FDA Board of Directors





# Kokoyah Administrative District

*Forest Management Committee (FMC)*

*Kokoyah Statutory District*

*Southeastern Bong County*

*Republic of Liberia*

Monday, March 14, 2011

Hon. Kederick F. Johnson  
Acting Managing Director  
Forestry Development Authority  
Wein Town  
Mount Barclay  
Monrovia, Liberia

## RE: REQUEST FOR PRIVATE LAND USE PERMIT


We the citizens of Kokoyah Administrative District, Bong County, represented by our civil and Traditional leaders, Elders, Chiefs, Zoes, Youth opinion leaders and the District Development Association has commenced negotiations with potential investors for the possibility of extraction of logs from our District.

Hon. Johnson, under the arrangement, we intent to relinquish all rights and privileges to our investors for the purpose of carrying full logging activities on 53,248 acres of forest land owned by the people of Kokoyah District, which is situated and lying in Bong County.

Owing to this back drop, we submit our deed and legal documentations for analysis and write on behalf of the citizens of Kokoyah District to request your honorable offices to grant the District Private Use Permit (PUP) under the amended Forestry Reform Law of 2006.

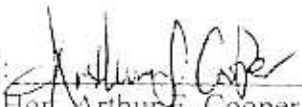
Your earliest response in granting our District Private Use Permit would highly be appreciated by the people of Southern Bong County.

Signed:

  
Rev. Andrew S. David

ELDER

Approved:

  
Hon. Arthur F. Cooper

ADVISOR

*Bar*  
*5/11*





REPUBLIC OF LIBERIA



Now ALL BY THESE PRESENTS, SMALL COMB: whereas it is the  
 basic policy of this Government to induce the Aborigines of this  
 Country to adopt Civilization and to become loyal citizens of  
 this Republic and whereas One of best means thereto is to  
 bring in fee simple to all those showing themselves to be  
 entrusted with the rights and duties of full citizenship as voters  
 and whereas the CHIEF, ELDERs and Citizens of ROKROYAH DISTRICT  
Central Province has showing themselves to be fit trustees with  
 rights and duties, Now know Ye that I Edwin J. Barclay President  
 of the Republic of Liberia for and in consideration of the various  
 titles of citizenship hereinafter to be legally performed by the  
 said above mentioned, I Edwin J. Barclay President of the Republic  
 of Liberia for myself and my successors in Office do hereby give  
 and by these presents do give, grant and confirm unto the  
 said, elders and Citizens of ROKROYAH DISTRICT their heirs,  
 executors, administrators or assigns forever all that parcel of  
 parcel of land situated, lying and being in ROKROYAH DISTRICT  
Central Province and bearing in the authentic records of said  
District the number and bounded and described as follows to-wit:  
 Commencing from the confluence of the For Creek and the St. John  
River which form the Political boundary between the Central Pro-  
vince and Grand Bassa County at point (A) thence running in the  
 northeastern direction along the St. John River a distance  
 of 102,500 meters to point (B), thence running North 72 degrees  
 West 3,300 m. to point (C); thence running North 30 degrees West  
 3,000 m to point (D); thence running due west 3,000 meters to  
 point (E); thence running North 50 degrees West 2,000m to point (F);  
 thence running North 25 degrees West 3,500m to point (G); thence  
 running North 60 degrees West 2,800m to point (H); thence running  
 South 85 degrees West 3,000m to point (I); thence running North  
 25 degrees West 2,800m to point (J); thence running North  
 West 4,700m to point (K); thence running South 4,000m to point (L);

17th

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2



2



to point (L); thence running South 87 degrees west 2,000  
 to point (M); thence running North 62 degrees west 1,500  
 to point (N); thence running South 71 degrees west 1,500  
 to point (O); thence running South 77 degrees west 3,000 to point (P);  
 thence running South 55 degrees west 1,500 to point (Q);  
 thence running South 34 degrees west 3,500 to point (R); thence running  
 North 70 degrees west 3,000 West 1,500; thence running South  
 1,500 to point (T); and thence running South 34 degrees  
 West 34,700 to the place  
 containing 220,766.52 acres of land more  
 to run the above granted premises together with  
 the buildings, improvements and appurtenances  
 belonging to the said Chief, Agents and Citizens their heirs,  
 executors, administrators or assigns, and I the said Edwin J.  
 Barclay President as aforesaid for myself and my successors  
 in Office do covenant to and with the said Chief, Agents and  
 Citizens their heirs, executors, administrators and assigns  
 until the hereinafter hereof I the said Edwin J. Barclay in and by  
 my virtue of my Office had right and lawful authority to convey the  
 aforesaid premises in fee simple, and I the said Edwin J. Barclay  
 President as aforesaid and my successors in Office do covenant to  
 defend and defend the said Chief, Agents and Citizens their heirs,  
 executors, administrators or assigns, against any person or persons  
 claiming any part of the above granted premises.

IN WITNESS WHEREOF I the said Edwin J. Barclay

Barclay President of Liberia and

set my hand caused the Seal of the Republic

to be affixed this 20th day of

1934 and of the Republic the 37th year.

Edwin J. Barclay  
President

6

MBO

Neighbors' Club from Republic of Liberia to Chief, J. C. G. S. ...  
and Citizens of Kakoyah District, Central Province ...  
"Let this be Registered" sgd. Hata Sir Brownell ...  
of the worthy and Probate Court, Mo. Co. Probated this ...  
of April A. D. 1934, sgd. J. Everett Sull Clerk of said court,  
at Mo. Registered according to law in Vol. 48 pages 56-57 ...  
sgd. Anna J. Taylor, Registrar, Mo. Co.

1784

A/B





March 27/11 - 229  
Asikye

REPUBLIC OF LIBERIA  
MINISTRY OF LANDS MINES & ENERGY

P. O. BOX 10-9024  
1000 MONROVIA 10, LIBERIA, WEST AFRICA  
TEL: (231) 226-8588 FAX: (231) 226-281



LIBERIAN CARTOGRAPHIC SERVICE

Exhibit "B"

April 26, 2011

Hon. Moses D. Wogbeh, Sr.  
MANAGING DIRECTOR  
Forestry Development Authority  
P.O. Box 10-3010  
Monrovia, Liberia

Dear Hon. Wogbeh:

We write to present our compliments, and acknowledge receipt of your letter dated 4<sup>th</sup> April 2011, Ref. No. MD/47/2011/4, requesting the Ministry of Lands, Mines & Energy to review, verify and authenticate deeds pertaining to Kokoyah District in Bong County and Deekpei Section, Compound #1, in Grand Bassa County and we are pleased to furnish you with the below results.

Sir, after carefully plotting, analyzing and field verification by our offices, it is observed that the documentations submitted were all found correct and the land un-incumbent, thus acknowledging that the Forestry Development Authority (FDA) could proceed with the granting of Private Use Permit in the interest of the above local communities.

In so doing, we advise the Forestry Development Authority to proceed in granting the PRIVATE USE PERMIT to the people of Kokoyah in Bong and the people of Deekpei Section, and Doe Clan of Grand Bassa County as permitted by the Forestry Development Authority (FDA)

We hope that the information thus provided can assist the FDA in her endeavours.

Sincerely yours,

Maxwell C. Maxwell  
DIRECTOR  
LIBERIAN CARTOGRAPHIC SERVICE



Mr. Sagbeh,  
Please work along  
with Mr. Kautov, Tanya,  
and Tally to produce  
the legal document  
in the pupas  
Director

#



Exhibit "C"

# OFFICE OF THE PARAMOUNT CHIEF

QUI-KON/SAWLO CLANS, KOKOYAH DISTRICT, BONG COUNTY.

TRIBAL LAND CERTIFICATE FORM: \_\_\_\_\_

TO: HON. ARTHUR F. COOPER/ADVISOR & INVESTOR

THIS IS TO CERTIFY THAT WE THE UNDERSIGNED LOCAL TRIBAL AUTHORITY INCLUDING CHIEFS, ELDERS, COMMISSIONERS, DISTRICT SUPERINTENDENT AS WELL AS YOUTH OF KOKOYAH DISTRICT, BONG COUNTY, REPUBLIC OF LIBERIA, ON THIS 28<sup>th</sup> DAY OF JUNE AD 2009, DO AGREE AND HAVE GIVEN PERMISSION TO GROUP OF FORESTRY EXPERTS COMPANY (GOFEC), REPRESENTED BY ITS PRESIDENT AND CEO MRS. BENELINE JOSARG OF THE CITY OF MONROVIA TO DO LOGGING IN THE FOREST AND LAND AREA COVERING KOKOYAH DISTRICT, KOKOYAH STATUTORY DISTRICT, BONG COUNTY. THE SAID LAND AREA COVERING THE FOLLOWING LAND MARKS QUI-KON AND SAWLA CLANS, HAVING COMPILED WITH NATIVE CUSTOMARY LAWS OF THE SAID TRIBES, ARE THEREFORE FREE TO EMPLOY THE SERVICES OF A LICENSED SURVEYOR TO SURVEY 53,248 ACRES OF LAND.

IT IS UNDERSTOOD THAT GROUP OF FORESTRY EXPERTS COMPANY (GOFEC) WILL LIAISE WITH THE APPROPRIATE GOVERNMENT AUTHORITIES TO ENSURE THAT THE TOTAL LAND AREA IS PROPERLY MAPPED OUT AND THAT ALL GOVERNMENT LICENSES FOR LOGGING IN THIS AREA ARE OBTAINED FOR THE UNENCUMBERED OPERATIONS OF THE COMPANY ON SAID TRIBAL RESERVES.

GIVEN UNDER OUR HANDS ON THIS 13<sup>th</sup> DAY OF JULY AD 2009

David R. Libokay  
TOWN CHIEF

Hon. Kerkula Odukelan Gurebo  
CLAN CHIEF - QUI-KON CLAN  
HCS XL

John Crakpan  
TOWN CHIEF

Hon. Milbert  
CLAN CHIEF - SAWLA CLAN

Edelard G. Yallah  
TOWN CHIEF

Hon. Togac S. Salye  
PARAMOUNT CHIEF  
HCS X

Rev. Andrew S. David  
ELDER

Hon. James M. Stalker  
DISTRICT COMMISSIONER

Spokie O. Oromu  
ELDER

Joseph W. [Signature]  
LAND COMMISSIONER

07/13/09

Hammer C. [Signature]  
YOUTH

[Signature]  
DISTRICT SUPERINTENDENT

July 28/2009

1700



Exhibit "D" in Bulk





Forestry Development Authority

P.O. Box 10-3010

Elise Saliby's Compound  
Kappa House, Congo Town  
Monrovia, Liberia

**MEMORANDUM**

TO: Moses D. Wogbeh, Snr.  
Managing Director.  
Forestry Development Authority

FROM: John D. Kantor, Snr.   
Technical Manager/R&D  
&  
Towon Nyenty   
Acting Manager, GIS & RS Labs

SUBJECT: *Kokoyah District Deeded Land and Prospection Report*

DATE: May 23, 2011

Predicated upon the request from the Kokoyah District Administrative Committee, for a team of forestry experts, made of Supervisor Tamba Brown, Tree Finder, James Laffor and a Global Positioning System (GPS) operator, Randal Sambollah went to Bong County, Kokoyah District, with the mandate to cruise a forests earmarked by the people of Kokoyah District as a possible and potential forest for the exploitation of logs.

During the inventory which lasted for seven consecutive days beginning from March 9-March 15 2009, the team extensively cruised the Western, Central and Eastern parts of the forest and carried out random sampling of commercial timber species to determine the forest composition, characteristics, topology and transportation (road network) of the forest.

After systematically assessing the area, the team was convinced that 95% of the forest is composed of primary forests while the balance 5% is agriculture degraded forests. Moreover, the forest area in question is highly productive and favorable for large scale logging (export and sawn timber production) for the duration of approximately eleven years. The forest area is assessable by a hundred miles paved motor road and thirty seven miles assessable by a secondary motor road that needs to be reconditioned by credible logging company if awarded the contract by the communities.

MDC

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### **Technical description**

Kokoyah District forest area is 137 miles accessible by primary and secondary motor roads by way of Monrovia, Kakata, Gbatala, Pengai, Taylor Town, Voloblai-Garyea, Karyata, Langonta, Sumopoia, Kuemba, Seegar Town, Guata Town and Mowayblee Towns, and is 145 miles accessible to the *Part of Monrovia*. Montserrado County for shipment of round logs

Kokoyah District forest land area lies within Latitudes 6°20'0" - 6°24'0" North of the equator and Longitudes 9°30'0" - 9°36'0" West of the Greenwich meridian and it is located in Bong County-LIBERIA

The boundary line of Kokoyah forested area commences at a point marked on the surface of the Earth Lat/Long (6°24'12.56" N-9°39'58.14"W), thence a line runs along the Saint John River in the northern direction for 21,039 meters to a point (6°28'12.70"N-9°32'05.11"W); thence a line runs N 16° W for 4,222 meters to a point; thence a line runs N 45° E for 6,990 meters to a point; thence a line runs N 32° E for 8,408 meters to a point; thence a line runs S 67° W for 10,106 meters to a point; thence a line runs N 31° W for 7,720 meters to the point on the Zor River; thence a line runs along the Zor River in the southern direction for 30,506 meters to the place of commencement (CONFLUENCE OF ZOR & ST. JOHN), embracing 21,549 hectares of land and NO MORE.

### **Global Positioning System (GPS) Points Taken By the CREW.**

Waypoints	Latitudes UTM	Longitudes UTM	Remarks or Land marks	X-Coordinates DD	Y-Coordinates
12	433567	714050			
1	433569	714052	Seegar town	-9.60102	6.45942
13	432252	712639	Bank St. John River	-9.60100	6.45944
24	432191	712518	Top of a Hill	-9.61289	6.44664
2	431818	712164	Side of St. John River	-9.61344	6.44555
23	431399	712034	Bank st. John River	-9.61681	6.44234
17	431201	712109	Side of low bush	-9.62060	6.44116
19	432242	713076	Footpath leading to Seegar Town from the River	-9.62239	6.44184
15	431165	711762	Junction water & road leading to Forest	-9.61299	6.45060
3	431268	711641	creek	-9.62271	6.43870
7	432476	712774	Bank St. John River	-9.62178	6.43760
6	431315	712847	High Forest	-9.61067	6.44787
18	431236	712862	High Forest	-9.62137	6.44851
10	431091	712707	Good terrain with commercial species	-9.62208	6.44865
16	430829	712414	Near old farm	-9.62339	6.44725
8	430290	712362	Edge of low bush	-9.62576	6.44459
11	429913	712351	High forest area with gentle terrain	-9.63063	6.44412
5	429763	712351	Rich forested area with mixed species	9.63404	6.44401
20	429374	711916	Dominant Gilbertiodendron & Tetraserpinia	-9.63540	6.44401
26	429329	711512	Mixed commercial species	-9.63891	6.44007
9	429564	711357	High forested area	-9.63931	6.43642
				-9.63718	6.43502

4	430091	711674	Dense forested area	-9.63242	6.43789
21	432283	712767	Near reef bush	-9.61261	6.44780
27	428209	711521		-9.64944	6.43648
14	427109	711494	Bank of Zor River	-9.65939	6.43623
22	426968	711962	Point taken at Zor River boundary between Bong	-9.66067	6.44046
25	432501	712756	Water fall	-9.61064	6.44770

### **Plot as a sample of the total forest.**

Measuring trees can be time consuming and costly operation, therefore only a sample of trees within a stand were measured by the inventory team to provide an estimate of the stand's growth (or sections of the stand's growth if different sections have been identified).

### ***Plot Dimensions***

Circular plots were used by the inventory team because it is easier to lay out in mature forest or irregularly spaced stands with low or high stocking rates where transects are poorly defined. Within Kokoyah area, all plots were selectively located or, more commonly, evenly distributed throughout the area using sensitivity analysis system. All plots are permanently marked on the ground and located on the field survey map.

### ***Example of Circular plot***

The system illustrated for circular plots allows trees to be easily referenced during the measurement exercise. The inventory was completed by measuring circular plots of 12 meters radius every 100 meters on random transects of 1.5x1.5 kilometer grid across the proposed logging area. The team measured a total of 18 plots in March 2009. Based on the transect and plots information the inventory team extrapolated estimates for the entire contract area between the two rivers.

*The maximum slope recorded is 25%, however only 5.6% of the area has a slope between 25-30%. Approximately 93.6% of the area is dry land, while 6.4% of the total area is possible wet lands, and 0 hectare or 0% of the area are rocky.*

*Some forms of animal observation (scat, prints, call or sighting) were recorded on the plot areas.*

*The inventory team established 18 plots. Tree per hectare is 194 while the estimated total cubic meter per hectare is 194.0. The estimated volume for the inventory area in all species classes is 970,175 meters cube based on the forest inventory.*

# Forest inventory results

Kokoyah District

## Slope, ground type and other observations

Total number of Plots: 18 Total Area: 4,045 ha

Plots by slope category (in %)	0-4	5-9	10-14	15-19	20-24	25-29	>=30	n.s.
Number of plots in slope category		3	10	4		1		0
Percent of plots in slope category		16.7%	55.6%	22.2%		5.6%		0.0%
Area in slope category (ha)		833	2,778	1,111		278		0
Maximum recorded slope	25%							
Length of transect > 25%	0%							
Length of transect with cliff	0%							
<b>Plots by ground type</b>								
	Dry	Wet/swampy	Rocky	n.s.				
Number of plots of each type	18	0	0	0				
Percent of plots of each type	100.0%	0.0%	0.0%	0.0%				
Area of each type (ha)	4,045	0	0	0				
<b>Waterways on transects</b>								
	None	<3 m wide	3-10 m wide	>10 m wide				
Number of observations	14	1	2	1				
Percent of transect	77.8%	5.6%	11.1%	5.6%				
Approx. area with waterways (ha)	3,889	278	556	278				
<b>Swampy/lowland areas on transects</b>								
	None	<1 hectare	1-5 hectares	>5 hectares				
Number of observations	18	0	0	0				
Percent of transect	100.0%	0.0%	0.0%	0.0%				
Approx. swamp area (ha)	0							
<b>Cleared areas on transects</b>								
	None	<1 hectare	1-5 hectares	>5 hectares				
Number of observations	18	0	0	0				
Percent of transect	100.0%	0.0%	0.0%	0.0%				
Approx. cleared area (ha)	0							
<b>Animal observations on transects</b>								
	Tracks	Scat	Vocalisations	Citings				

## Forest inventory results

Kokoyah District

### Slope, ground type and other observations

Total number of Plots: 18	Total Area: 4,045 ha		
Number of observations	18	12	4
Percent of transect	100.0%	66.7%	22.2%
Approx. area with observations (ha)	4,045	3,333	1,111
		4,722	

## Forest inventory results

Kokoyah District

### Stocking by forest type

Trees with dbh  $\geq$  40cm

Forest type	No. of plots	Number	Basal area Volume	
			(m <sup>2</sup> )	(m <sup>3</sup> )
3.2 Open dense forest	16			
	Average per ha	201.7	57.1	574.9
	Std Dev	26%	28%	35%
	Std Err (p=0.1)	11%	12%	15%
	Lower CI	178.5	50.1	487.7
3.3 Closed dense forest	2			
	Average per ha	132.6	33.5	312.7
	Std Dev	71%	84%	80%
	Std Err (p=0.1)	316%	374%	359%
	Lower CI	-286.1	-91.9	-808.8
3.* All forest dominated strata	18			
	Average per ha	194.0	54.5	545.8
	Std Dev	30%	33%	39%
	Std Err (p=0.1)	12%	14%	16%
	Lower CI	169.8	47.0	458.0
Total	18			
	Average per ha	194.0	54.5	545.8
	Std Dev	30%	33%	39%
	Std Err (p=0.1)	12%	14%	16%
	Lower CI	169.8	47.0	458.0
	Total	970,158	272,507	2,728,966
	Lower CI	849,199	235,165	2,289,766



# Forest inventory results

Kokoyah District

## Stocking by species category

Trees with dbh >= 40cm

### Species category

Species category		Number	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )
A	Class A			
	Average per ha	120.3	33.1	333.3
	Std Dev	38%	42%	48%
	Std Err (p=0.1)	16%	17%	20%
	Lower CI	101.4	27.4	267.9
	Total	601,744	165,719	1,666,572
	Lower CI	506,910	137,066	1,339,684
B	Class B			
	Average per ha	34.4	9.5	90.7
	Std Dev	80%	91%	100%
	Std Err (p=0.1)	33%	37%	41%
	Lower CI	23.1	6.0	53.4
	Total	171,927	47,482	453,618
	Lower CI	115,405	29,775	267,001
C	Class C			
	Average per ha	39.3	11.9	121.8
	Std Dev	76%	74%	77%
	Std Err (p=0.1)	31%	30%	31%
	Lower CI	27.0	8.3	83.4
	Total	196,488	59,306	608,776
	Lower CI	135,181	41,349	417,224

## Forest inventory results

### Number of trees per ha by species and diameter classes

Total number of Plots: 18 Selected Stratum: \* All strata

Total for all species categories:

Category	Botanical name	Total max	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-
149	>= 150	194.0	60.2	45.4	40.5	25.8	14.7	7.4					

#### A Class A

	<i>Diachrysia leonensis</i>	120.3	39.3	30.7	25.8	11.1	6.1	7.4					
	<i>Canarium schweinfurthii</i>	1.2			1.2								
	<i>Cesiba pectandra</i>	4.7			2.5								
	<i>Clitrochloa spp. (Regia ex.)</i>	1.2	1.2					1.2					
	<i>Gibbertiodesia prunifolia</i>	54.0	16.0	17.2	12.3	3.7	3.7	1.2					
	<i>Leffera utilis</i>	17.2	11.1	4.9	1.2								
	<i>Leopoldia alba</i>	7.4			2.5	2.5	1.2	1.2					
	<i>Piptadenium africanum</i>	9.8				3.7	1.2	1.2					
	<i>Tetraberula tobianaia</i>	24.6	11.1	7.4	6.1			1.2					

#### B Class B

	<i>Aucoussia kluweana</i>	34.4	7.4	9.8	7.4	9.8							
	<i>Bambusa burongroense</i>	6.1	1.2	3.7	1.2								
	<i>Dacrydium thurifera</i>	1.2		1.2									
	<i>Dielsia indica</i>	2.5			1.2								
	<i>Erythraea spp.</i>	6.1		1.2	2.5	1.2							
	<i>Marrubium africanum</i>	4.9	2.5			2.5							
	<i>Ocotelea africana</i>	1.2	1.2										
	<i>Ocotelea africana</i>	8.6	2.5										
	<i>Pyrenaria angolensis</i>	1.2		2.5	2.5	1.2							
	<i>Sacoglottis gossweileri</i>	1.2		1.2									

#### C Class C

	<i>Anthanolia fragrans</i>	39.3	13.5	4.9	7.4	4.9	8.6						
		1.2			1.2								

Category	Botanical name	Total max	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-
[49 ≥= 150	Cajuput/yz spp (ambexilia)	4.9	3.7		1.2								
	Dalium spp	1.2	1.2										
	Diodecia brevipanicata	1.2	1.2										
	Fagara macrophylla	1.2	1.2										
	Houttuia kauruan	1.2				1.2							
	Klaineodoxa gabonensis	1.2						1.2					
	Other species	1.2		1.2				1.2					
	Panicum excedis	16.0	3.7			3.7	3.7	4.9					
	Parkia bicolor	6.1	1.2	2.5				2.5					
	Uapaca spp	3.7	1.2	1.2		1.2							

## Forest inventory results

### Volume per ha by species and diameter classes

Total number of Plots: 18 Selected Stratum: \* All strata

Total for all species categories:

Category	Botanical name	Total max	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-
149	>= 150	545.8	67.6	88.6	127.3	113.1	87.9	61.3					

#### A Class A

<i>Brachystegia leonensis</i>	333.3	44.0	57.6	82.7	51.6	36.1	61.3						
<i>Cuscuta schweinfurthii</i>	4.0				4.0								
<i>Cordia pentandra</i>	13.0				7.1	5.8							
<i>Chlorophora</i> spp. (Kegon ex.)	13.9							13.9					
<i>Gilbertiodendron prussii</i>	1.6	1.6											
<i>Heritiera utilis</i>	141.2	18.5	31.1	40.2	18.1	22.4	10.9						
<i>Leopoldia alata</i>	24.7	10.3	10.8	3.6									
<i>Piptodendron africanum</i>	40.2			9.7		11.1	7.7	11.8					
<i>Tetraerthra tuberculata</i>	49.5		2.2										
	45.2	13.6	13.5	18.2		10.6	6.0	24.7					

#### B Class B

<i>Acropysis kintanae</i>	90.7	8.6	21.3	23.3	37.3								
<i>Bombax huonpoense</i>	12.5	1.8	6.6	4.1									
<i>Daniella thurifera</i>	3.5		3.5										
<i>Dialodia alba</i>	7.7												
<i>erythrophloeum</i> spp	22.1			2.8	4.9								
<i>Mammea africana</i>	12.3	3.2	3.2	8.2	10.6								
<i>Oldfieldia africana</i>	1.0	1.0			9.1								
<i>Pyrenidium angolense</i>	20.5	2.5	5.9	8.2	4.3								
<i>Sauroglottis gabonensis</i>	2.5		2.5										
	8.6				8.6								

C Class C

Anthrenotha fragrans 121.8 15.1 9.7 21.2 24.1 81.8

Category 149 Botanical name  $\geq 150$  Total max -40-49 50-59 60-69 70-79 80-89 90-99 100-109 110-119 120-129 130-139 140-

Calceoliz spp (anthrenotha)  
 Dialium spp 7.6 3.7 2.6 3.9  
 Dielodia berypanchala 1.3 1.3  
 Fageta untoplylla 1.2 1.2  
 Haemra Klaxana 1.2 1.2  
 Klamedoxa gelovensis 6.2 6.2  
 Other species 7.8 7.8  
 Lanthari exocela 2.6 2.6  
 Paria bicolor 64.9 4.3 10.9 17.8 31.8  
 Lepusa spp 18.8 1.8 4.9 3.4 12.1  
 7.1 1.6 2.2

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## Forest inventory results

### Stocking per ha by species and size

Total number of Plots: 18 Selected Stratum: \*

All strata

Total for all species categories:

Category	Botanical name	Trees with dbh>=40cm						Trees with dbh>=cutting limit									
		1940	54.5	545.8	60	16	49.1	22.7	252.2	77							
		Number (stems/ha)	Basal area (m <sup>2</sup> /ha)	Volume (m <sup>3</sup> /ha)	dbh (cm)	Height (m)	Number (stems/ha)	Basal area (m <sup>2</sup> /ha)	Volume (m <sup>3</sup> /ha)	dbh (cm)	Height (m)						
A Class A	<i>Brachystegia leonensis</i>	120.3	62.0	33.1	60.8	333.3	61.1	59	16	24.6	50.0	12.0	52.8	135.5	57.7	79	
	<i>Canarium schweinfurthii</i>	1.2	0.6%	0.4	0.7%	4.0	0.7%	6.5	18	1.2	2.5%	0.8	3.4%	11.8	4.7%	90	
	<i>Cesba pentandra</i>	3.7	1.9%	1.2	2.1%	13.0	2.4%	64	19	3.7	7.5%	2.4	10.7%	24.7	9.8%	92	
	<i>Clitrochloa spp. (R. egu ex.)</i>	1.2	0.6%	0.9	1.6%	13.9	2.6%	96	26	1.2	2.5%	0.9	3.9%	13.9	5.3%	96	
	<i>Clitrochloa pennisii</i>	1.2	0.6%	0.2	0.4%	1.6	0.3%	46	16	1.2	2.5%	0.9	3.9%	13.9	5.3%	96	
	<i>Heritiera utilis</i>	54.0	27.8%	14.6	26.8%	141.2	25.9%	59	15	16.0	32.5%	7.1	31.4%	77.4	30.7%	75	
	<i>Lophira alata</i>	17.2	8.9%	2.9	5.4%	24.7	4.5%	47	16	1.2	2.5%	0.8	3.4%	11.8	4.7%	90	
	<i>Phadoniasia africana</i>	7.4	3.8%	3.2	5.8%	40.2	7.4%	74	21	3.7	7.5%	2.4	10.7%	24.7	9.8%	92	
	<i>Ternstroemia tanzaniana</i>	9.8	5.1%	4.9	8.9%	49.5	9.1%	79	18	2.5	5.0%	0.8	3.4%	11.8	4.7%	90	
		34.6	17.7%	4.9	9.0%	45.2	8.3%	50	16	8.6	17.5	3.1	13.8	32.8	13.0	68	
		34.4	17.7	9.5	17.4	90.7	16.6	59	16								
	B Class B	<i>Antoxyxis klaineana</i>	6.1	3.2%	1.4	2.6%	12.5	2.3%	54	15	1.2	2.5%	0.4	1.8%	4.1	1.6%	65
		<i>Bambusa heteropogon</i>	1.2	0.6%	0.3	0.6%	3.5	0.6%	59	18	1.2	2.5%	0.4	1.8%	4.1	1.6%	65
		<i>Daniella thurifera</i>	2.5	1.3%	0.9	1.6%	7.7	1.4%	68	15	1.2	2.5%	0.5	2.1%	4.9	1.9%	71
		<i>Didelotia ides</i>	6.1	3.2%	2.0	3.7%	22.1	4.0%	65	18	3.7	7.5%	1.4	6.0%	15.2	6.0%	69
<i>Erythrophloeum spp</i>		4.9	2.5%	1.3	2.5%	12.3	2.3%	59	14								
<i>Mannan africana</i>		1.2	0.6%	0.2	0.3%	1.0	0.2%	41	10								
<i>Oldfieldia africana</i>		8.6	4.4%	2.1	3.9%	20.5	3.8%	56	16	2.5	5.0%	0.9	3.9%	8.7	3.4%	68	
<i>Pyramhus angolensis</i>		1.2	0.6%	0.3	0.5%	2.5	0.5%	51	18								
<i>Suaegottia gabonensis</i>		2.5	1.3%	0.9	1.7%	8.5	1.6%	70	17								





# Forest inventory results Total stocking by species and size

Total number of Plots: 18 Total Area: 4,045 (100%) Selected Stratum: \*

All strata

Total for all species categories:

Category	Botanical name	Trees with dbh>=40cm			Trees with dbh>=cutting limit							
		Number (stems)	Basal area (m2)	Volume (m3)	Number (stems)	Basal area (m2)	Volume (m3)					
A	Class A	601,744	62.0	165,719	60.8	1,666,572	61.1	122,805	50.0	60,002	52.8	677,664
	Brachystegia lewensis	6,140	0.6%	2,038	0.7%	20,009	0.7%	6,140	2.5%	3,906	3.4%	58,884
	Canarium schweinfurthii	18,421	1.9%	5,835	2.1%	64,755	2.4%	18,421	7.5%	12,165	10.7%	123,698
	Celtis pectinaria	6,140	0.6%	4,444	1.6%	69,597	2.0%	6,140	2.5%	4,444	3.9%	69,597
	Chlorophora spp (Regia ex.)	6,140	0.6%	1,020	0.4%	8,223	0.3%					
	Gilbertodendron preussii	270,171	27.8%	73,029	26.8%	705,789	23.9%	79,823	32.5%	35,655	11.4%	386,788
	Heritiera utilis	85,963	8.9%	14,685	5.4%	123,375	4.5%	6,140	2.5%	3,906	3.4%	58,884
	Lophira alata	36,841	3.8%	15,862	5.8%	201,155	7.4%	18,421	7.5%	12,165	10.7%	123,698
	Pygadendastrum africanum	49,122	5.1%	24,382	8.9%	247,655	9.1%	12,280	5.0%	3,812	3.4%	38,697
	Tetraberthia inbuniana	122,805	12.7%	24,424	9.0%	226,015	8.3%					
B	Class B	171,927	17.7	47,482	17.4	453,618	16.6	42,982	17.5	15,696	13.8	164,106
	Antopryx kleiniana	30,701	3.2%	7,036	2.6%	62,731	2.3%	6,140	2.5%	2,638	1.8%	20,502
	Bombax thurongense	6,140	0.6%	1,679	0.6%	17,405	0.6%					
	Daniella turrita	12,280	1.3%	4,469	1.6%	38,562	1.4%	6,140	2.5%	2,431	2.1%	24,405
	Dialodia lida	30,701	3.2%	10,185	3.7%	110,352	4.0%	18,421	7.5%	6,827	6.0%	75,783
	Erythrophloeum spp	24,561	2.5%	6,679	2.5%	61,506	2.3%					
	Mannan africanum	6,140	0.6%	811	0.3%	5,209	0.2%					
	Olafordia africana	42,582	4.4%	10,643	3.9%	102,430	3.8%	12,280	5.0%	4,401	3.9%	43,416
	Pyrenanthus angolensis	6,140	0.6%	1,254	0.5%	12,392	0.5%					
	Suaeda guborenensis	12,280	1.3%	4,726	1.7%	43,031	1.6%					
C	Class C	196,488	20.3	59,306	21.8	608,776	22.3	79,823	32.3	37,892	31.4	419,075
	Category	Botanical name	Trees with dbh>=40cm			Trees with dbh>=cutting limit						

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	Number (stems)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Number (stems)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )
<i>Anthoella fragrans</i>	6,140	1,736	15,053	6,140	2,713	31,224
<i>Calpocalyx</i> spp. (with eville)	24,561	4,169	37,929	24,561	2,596	39,244
<i>Dialium</i> spp.	6,140	772	6,476	6,140	3,484	39,244
<i>Didelotia brevipaniculata</i>	6,140	772	5,836	6,140	3,195	39,244
<i>Fagraea unguiculata</i>	6,140	772	6,080	6,140	3,484	39,244
<i>Hemura klainiana</i>	6,140	2,713	31,224	6,140	2,713	31,224
<i>Klaineodora gombakensis</i>	6,140	3,484	39,244	6,140	3,484	39,244
Other species	6,140	1,206	12,892	6,140	3,484	39,244
<i>Panturi excelsa</i>	79,823	29,739	324,390	79,823	29,739	324,390
<i>Parkia bicolor</i>	30,701	10,026	93,949	30,701	10,026	93,949
<i>Tapaca</i> spp.	18,421	3,918	5,701	18,421	3,918	5,701

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**Maps of the Area Surveyed.**

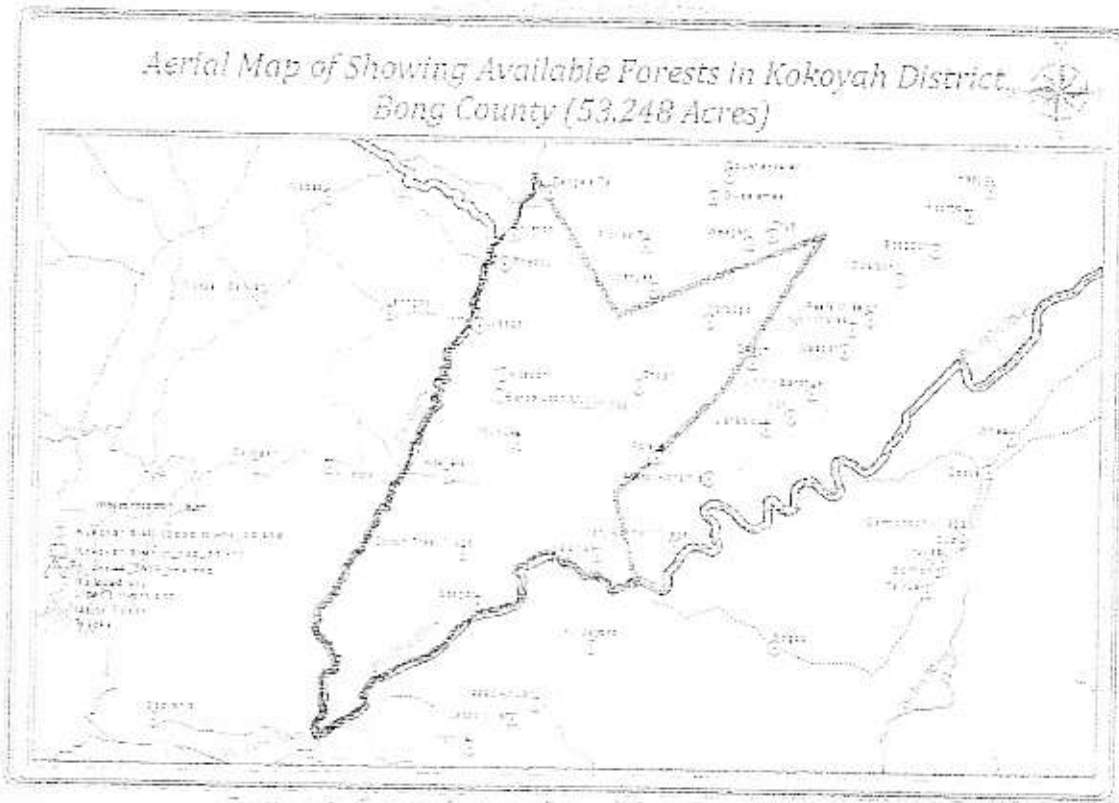
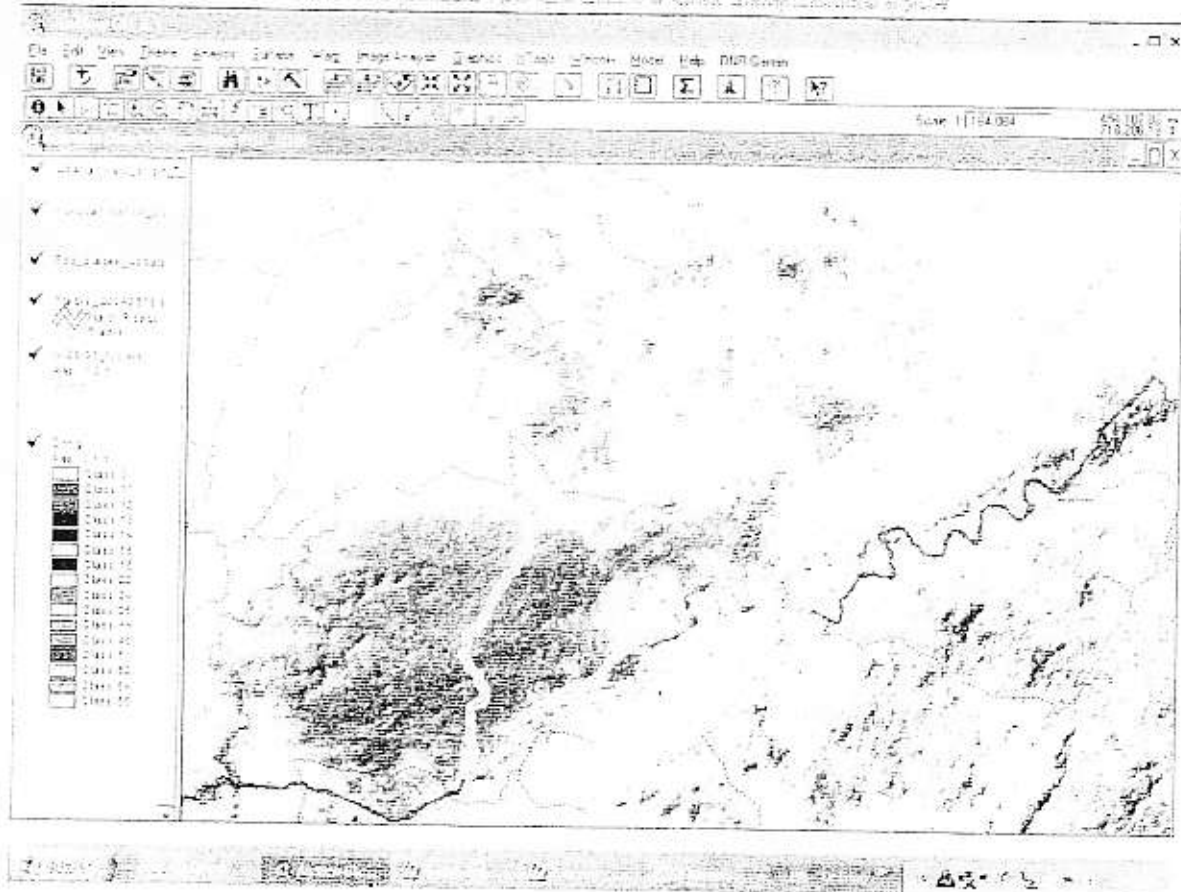


Figure 1. Aerial Map of Showing Available Forests in Kokoyah District, Bong County, Liberia



M-100

## Findings

Following an intensive tour by our technicians we observed and authenticated that:

- ✦ The Technical description/Metes & Bounds of Kokoyah deeded land property was plotted and verified on the grounds using high precision gadgets by Messrs. Brown, Laffor and Sambollah;
- ✦ Kokoyah's commencement/starting point in the deed commences at a point marked on the surface of planet earth Latitudes  $6^{\circ}24'12.56''N-9^{\circ}39'58.14''W$ ;
- ✦ After plotting the bearings and distances on the deed with captured coordinates, it was observed that 100% of Kokoyah's deeded land falls into Kokoyah District, Bong County;
- ✦ Indeed the Kokoya's deed bearings and distances are well computed;
- ✦ The total available land mass for commercial logging within Kokoyah's District is 53,248 acres;
- ✦ The area is the home of some protected wildlife animals species
- ✦ Topographically, the entire land mass of Kokoyah's District deed submitted to FDA is relatively flat with two major water ways, namely Saint John River and the Zor River.
- ✦ The areas are truly located in Bong County.

## Recommendation

In view of the verification and confirmation of these documents by the Forestry Development Authority, coupled with our ground truthing, we herein recommend the followings:

- ✦ That the deed be validated by the Ministry of Lands, Mines & Surveys, to enable FDA surveying crew conduct a cadastral survey, also, FDA should perform a Sensitivity Analysis on the Kokoyah's Tribal property to avoid future encroachment by Campwood Gheegbarn District thou the Zor River serve as a major boundary between the two counties and districts. After re-authenticating the deed and found legitimate, with coordinates of perimeters provided to FDA GIS Laboratory, the FDA should perform the below activities:
- ✦ As per National Forestry Reform Law (NFRL) of 2006 provision in chapter five section 5.6, we therefore recommend that FDA Management issue a **Private Use Permit** for Kokoyah District commercial Land totaling **53,248 acres** to the people of Bong County in compliance with all relevant requirements of this section (particularly section 5.6 c (i,ii,iii) and d (i,ii,iii,iv,v,vi) respectively).

FROM PROSPECTION TEAM  
Monrovia, Liberia



*Private  
Use Permit*