AGROCADASTRAL MAPPING OF PALM TREES ON FARMLANDS FOR A GOOD LAND USE AND POVERTY ERADICATION IN DELTA STATE OF NIGERIA

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Key words: Access to Land

SUMMARY

AgroCadastral Palm Trees Mapping in Delta State is a case study for good Land Management and poverty eradication. Farmlands are mainly in the hands of peasant farmers with Palm Trees virtually on all farmlands without any good management of the cash crop. The Palm Trees as cash crops if well managed is a possible means for poverty eradication. This study is to present the procedure for the mapping of the palm trees on the peasant farmers farmlands and how to use it to eradicate poverty among the peasant farmers in Delta State of Nigeria. Palm Trees per point of growth shall be mapped on per hectare parcels of land; the parcels shall be tagged with alpha numeric tags; for easy parcels and palm trees management on the lands. Parcels to be mapped will have other crops of cultivations with the land titling. Farmlands in the hands of peasant farmers in Delta State of Nigeria and the sizes with will be mapped and analyzed for possible increase in the income of the peasant farmers of the rural communities in Delta State of Nigeria.

Figure 1:Delta State Agricultural Field Office at Oria Abraka Delta State of Nigeria. Source – Hydroark Library (April 2022)

1.0 AGROCADASTRAL FARMLANDS MAPPING PROCEDURE DEFINITION:

Mapping procedure is fit for purpose method bearing in mind that Land Administration should be designed to meet the needs of people and thier relationship to land, to support security of tenure for all and to sustainably manage land use and natural resources.

Fit – for – purpose procedure includes the following elements:

- Flexible
- Inclusive.
- Participatory.
- Affordable.
- Reliable.
- Attainable.
- Upgradeable

Fit – for – Purpose has four key Principles:

- General boundaries rather than fixed boundaries.
- Aerial imageries rather than field surveys.
- Accuracy relates to the purpose rather than technical standards.
- Opportunities for updating, upgrading and improvement.

Sources: FIG Publication Number 60 - FIG/WB, 2014.

Using fit for purpose procedure and key principles for the Agrocadastral Farmlands Mapping for the Palmtrees we used Google Earth Imageries.

Delta State Geography of drainage and relief is of low wetlands in the South and Central districts while Northern district is of relative high grounds. Palm Tree Belts is in the three districts but relatively more in the Central to North than South.

Delta State is of THREE Political Districts of TWENTY FIVE Local Govertment AREAS which we are adopting for this project.

- South Senatorial District.
- Central Senatorial District.
- North Senatorial District**.**

Rural Settlements were used as focal points of studies randomly mapped and defined as pilot fit for purpose mapping.

SENATORIAL DISTRICTS	LOCAL GOVERNMENT AREAS	TOWNS	AREA IN HECTARES	FARMERS
SOUTH	**Bomadi, Burutu, Isoko North, Isoko South, Patani, Warri North, Warri South, Warri South West.**	*** Bomadi. * Burutu. * Patani. * Koko. * Omadino**	**TWENTY**	**TEN**
CENTRAL	**Ethiope East, Ethiope West, Sapele, Okpe, Ughelli North, Ughelli South, Udu, Uvwie.**	***Isiokolo. * Oghara. *Sapele. * Ughelli. *Ekapamre. * Agbarho. *Abraka**	**THIRTY**	**FIFTEEN**
NORTH	**Aniocha North, Aniocha South, Ika North East, Ika South, Ndokwa East, Ndokwa West, Oshimili South, Oshimili North, Ukwuani**	***Illah. *Agbor. * Umunede. *Abavo. *Kwale. *Ogwashiukwu. * Ishiagu. *Obiaruku. *Issele – Uku**	**FORTY**	**TWENTY**

Table 1: Showing the Fit – For – Purpose Mapping Schematic Outlay

See the Delta State Political Map here under:

- **DELTA SOUTH SENATORIAL DISTRICT**
- **DELTA CENTRAL SENATORIAL DISTRICT**
- **DELTA NORTH SENATORIAL DISTRICT**

Figure 2: Delta State Political Map. Source https://reformeronline.com/wp-content/uploads/2017/08/Delta-State-Political-Map.jpg.

2.0 FARMSTEADS AND PALM TREES SURVEY

With the aid of Google Earth Imageries, Farmsteads were mapped out with Geographical coordinates. The farmers were usually Females and Children.

The major Food Crops is Cassava in all the THREE GEO POLITICAL ZONES with Palm Trees dotting the farmsteads. The shape of farms are usually polygonal of not square four corners. Average of TEN to TWENTY Palmtrees can be found on every ACRE of land cultivated.

The Palmtrees are all of higher heights with low yielding; all these shall be replaced with high yielding species with more income and easy harvest because of short heights.

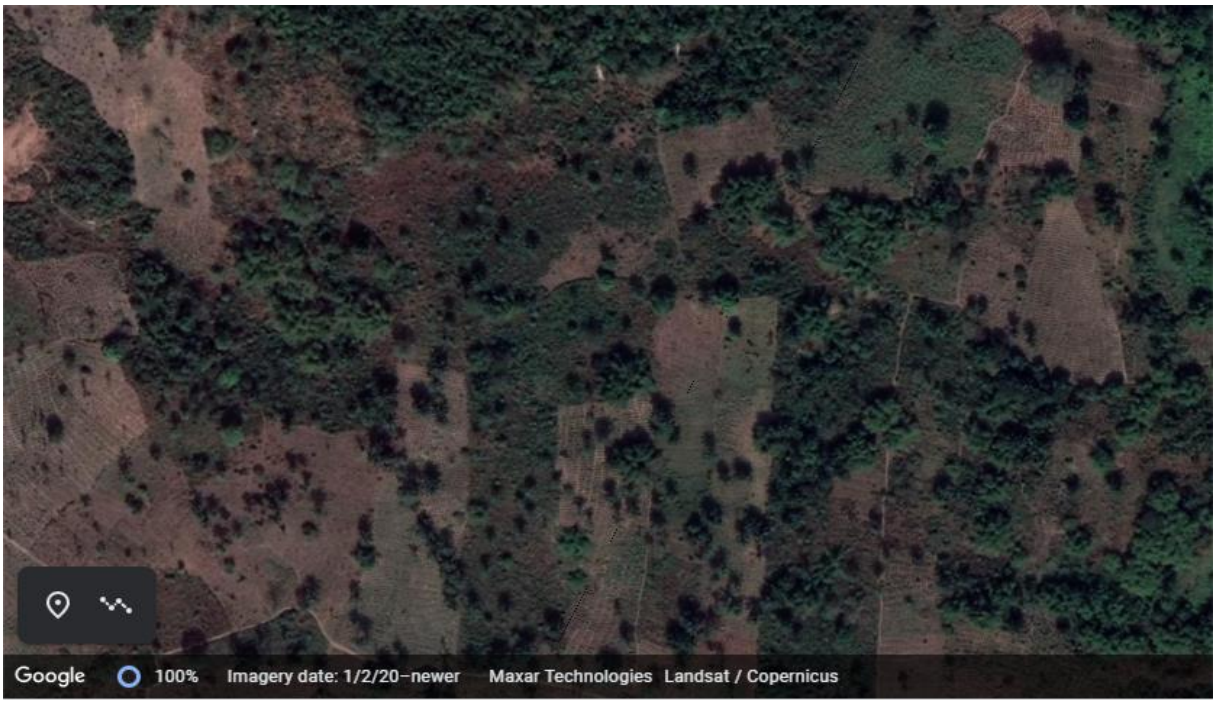

Figure 3: Delta North Axis Illah Farmsteads with Palm Trees

Figure 4: Farmsteads with Palm Trees Cultivation in Obiaruku of North District in Delta State.

Figure 5: Palm Seeds wasting away on a Casava Farm in Ekapamre, Central District of Delta State. Source – Hydroark Library (March 2022)

3.0 VARIABLES IN THE ALPHANUMERIC TAGGING OF FARMSTEADS

S/N	FARMER NAME	PHONE NO.	FARM SIZE	PALM TREES

1. Coordinates in Geographical based on WGS 84 Datum.
2. Senatorial District.
3. Gender.
4. Annual Income.
5. Access to Loan.
6. Land Title.
7. Any Cooperative Society.
8. Next of Kin.
9. Married or Divorced.
10. Any other Information.

4.0 PROJECT EXPECTATIONS AND EXECUTION

This project is a Proposal for an Agro Allied Company. It is an option against OIL PALM PLANTATION VAST LAND ACQUISTION.

Land Acquisitions with Poor Land Administrations usually cause land grabbing, violent resistant, disputes and poverty precipitation.

Plantations are usually in thousands of Hectares depriving peasant farmers access to land and heritage links. A Agro Allied Company wants a paradigm shift; which necessitated this project. The Agro Allied Company is targeting ONE MILLION PALM TREES in partnership with the Peasant Farmers where it is going to be “WIN WIN AGROCADASTRAL PARTNERSHIP” (WWACAP).

Figure 6: Farmland Acquistion with Palm Trees in Ekapamre in Delta State of Nigeria. Source – Hydroark Library (March 2022)

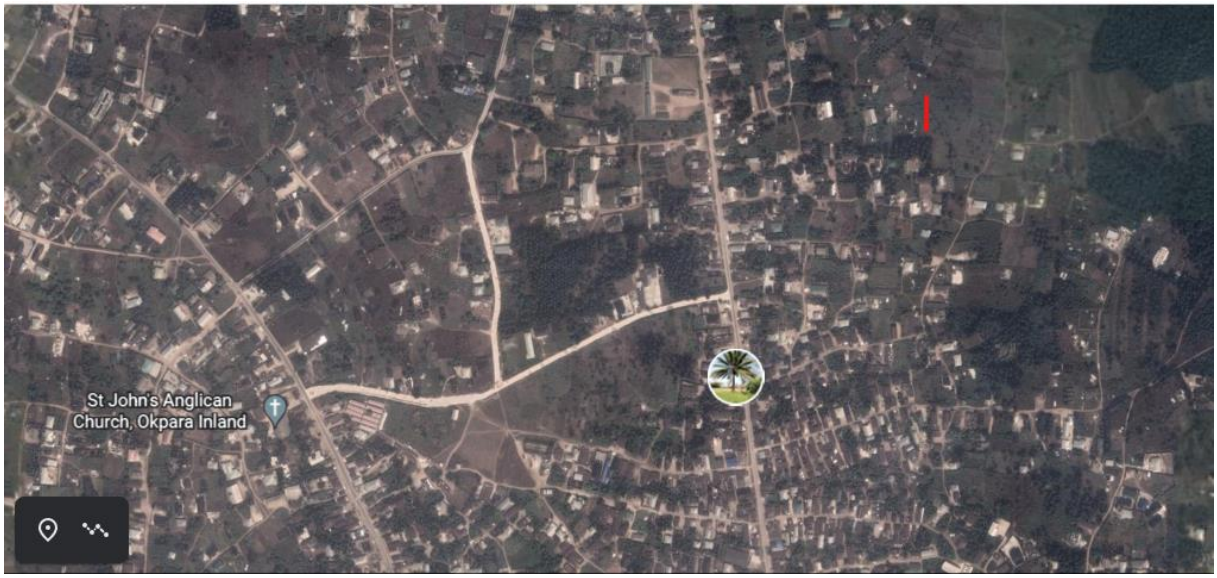

Figure 7: WWACAP Solutions and Potentials

5.0 CONCLUSION:

The approximate SIXTY PALMS TO AN ACRE which gives ONE HUNDRED AND FIFTY PALMS PER HECTARE will give ONE MILLION PALMS to SIX THOUSAND, SIX HUNDRED AND SIXTY SEVEN HECATRES.

Acquistion and Land Adminsistration of this size in terms of cost, conflict resolutions and its exigencies will make WWACAP a possible option to explore.

Palm Trees with WWACAP approach is not a new venture in Delta State of Nigeria. Rubber Plantations in Delta State have been using it for a long time but Palm Trees have not been brought into it.

Each Palm tree under WWACAP shall have coordinates with database showing variables in terms of Location, Height, Age, Owner, Land Title, Yield, Contracts, Attendants etc.

Oil Mills will be located in the areas of easy access and other possible availability of inputs and infrastructures. This project will impove the INCOME of the Peasant Farmers; expected to make life more meaningful to them and save cost of land acquistions for the company.

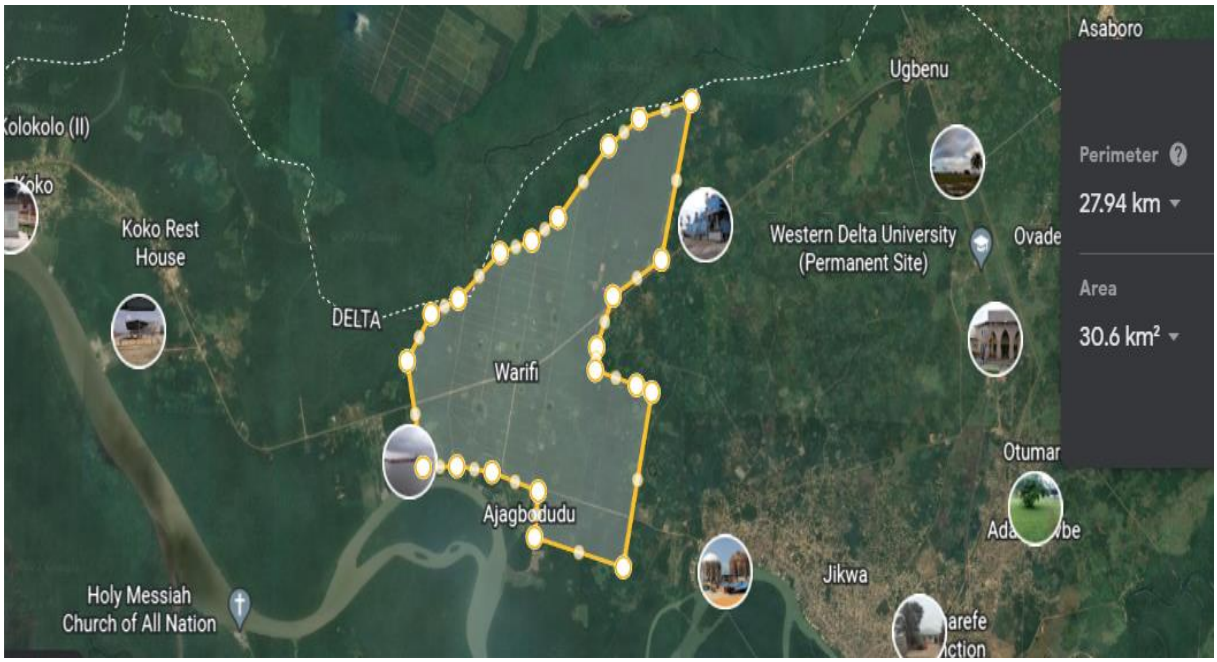

Figure 8: A Plantation on 30.6kilometer square

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BIOGRAPHICAL NOTES

Surveyor DABIRI, Oluseye Thomas (fnis) is the Founder, Chairman and Managing Director of Hydroark International Limited based in Warri – Delta State of Nigeria. Delta State Immediate Past Chairman of Association of Private Practising Surveyors in Nigeria (APPSN) and now National Chairman of APPSN in Nigeria.

A Graduate of Geography from Premier University of Ibadan (BSc Hons 1987). Post Graduate Diploma in Surveying from Federal Survey School Oyo (1990). Registered Surveyor (1992). Graduate Assistant 1987 to 1988 in Geography Department of University of Lagos for research support for desertification monitoring in Bakolori Northern Nigeria with Canadian University of Waterloo using Remote Sensing. Delivering Lectures at FIG since 2010 till date. A Fellow of Nigerian Institution of Surveyors since 2015, versatile Professional Practitioner in Niger Delta of Nigerian Oil and Gas Survey Support Services covering Land, Swamp and Offshore since 1991 till date 2022 with wide interest in Cadastral and Property Development Survey, Engineering Survey, Hydrographic Survey, Geophysical Survey, Environmental Survey and General Consultancy Services.

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