Roundtable on Sustainable Palm Oil



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List of Acronyms and abbreviations

| ANGE: | Agence Nationale de Gestion Environnementale - National Agency for Environment Management |
|---------|---|
| CVD | Comité de Developpement Villageois – Village Development Committee |
| DSID | Direction des Statistiques Agricoles de l'Informatique et de la Documentation – Direction of Agricultural Statistics, IT and Documentation |
| ESIA: | Environmental and Social Impact Assessment |
| FED: | Fond Européen de Développement – European Development Fund |
| FEPH | Féderation des Exploitants de Palmiers à Huile – Oil Palm Operators Federation |
| FPIC | Free Prior and Informed Consent |
| IBA | Important Bird Area |
| IPA | Important Plant Area |
| KBA | Key Biodiversity Area |
| HCV: | High Conservation Value |
| JVE: | Jeunes Volontaires pour l'Environnement – Youth Volontary for Environment (NGO) |
| MAEP: | Ministère de l'Agriculture, de l'Élevage et de la Pêche – Ministry of Agriculture, Livestock farming and Fisheries |
| MCDAT | Ministère de la Coopération, du Développement et de l'Aménagement du Territoire – Ministry of Cooperation, Development and Territory Planification |
| MERF | Ministère de l'Environnement et des Ressources Forestières - Ministry of Environment and Forest Ressources |
| PGES: | Plan de Gestion Environnemental et Social - Socio-Environmental Management Plan |
| SONAPH: | Société Nationale de développement des Palmeraies et Huileries - National Society for oil palm plantations and mills development |
| IUCN | International Union for Conservation of Nature |

I Executive summary

This report presents the executive summary of the final results of the Social and Environmental Impact Assessment and High Conservation values of Kalyan's oil palm plantation in the Plateaux Region of Togo. Kalyan AgroVet Investments Limited (hereafter referred as "**Kalyan**"), a company with Indian capitals, has started negotiations with the Government of Togo in 2014 to acquire a 7,263 ha concession in the South of the country. A Memorendum of Understanding (MoU) has been signed the 13th of November 2014 between the two parties. The objective of this MoU is to develop an industrial oil palm plantation which will supply a CPO mill.

The concession is located in the Plateaux Region, district of Agou, in the ecological zone known as the "middle plains zone" or zone III. It is mainly located on fallows, croplands and patches of former palm oil plantations. The proposed concession has a long history of oil palm industry starting back in the 19th century, during German colonization.

It is anticipated that 6,000 ha will be planted out of the 7,263 ha of the concession. There are 14 communities living in and around the boundaries of the proposed concession.

As part of its commitment to environmental sustainability and in line with its own environmental policy, Kalyan intends to undertake this plantation development in compliance with all relevant local Togolese legal requirements and those of the Roundtable on Sustainable Palm Oil (RSPO) certification.

Essential requirement of RSPO certification prior to land conversion (as part of its New Planting Procedure - NPP) is impact assessments including identification and management of HCVs (High Conservation Values) and Environmental and Social Impact Assessments (ESIA). Oil palm plantation developers are then expected to develop appropriate strategies to mitigate any potential social and environmental impacts as well as manage areas identified to contain HCVs to ensure those values are maintained or enhanced. Kalyan intends to achieve RSPO certification, thus making it crucial for the company to meet HCV and ESIA requirements under RSPO certification.

Responding to the legal requirements in Togo, Kalyan has commissioned a local company (JAT Consulting Ltd) to undertake the ESIA for the project. *JAT Consulting* is a consulting company accredited by the Togolese Ministry of Environment to undertake ESIA.

In order to ensure efficiency and cost-effectiveness of the impact assessments, Kalyan has requested Mr DUVAL (who has a provisional license to undertake HCV assessment as Team Leader) and JAT to jointly undertake the HCV and social impact assessments.

This reports details the assessment that has been undertaken from December 2014 to April 2015, the High Conservations Values (HCV) and the social and environmental impacts identified, as well as the management and monitoring recommendations for their protection in the proposed concession allocated to Kalyan.

I.1 Primary forests

There are no primary forests in the assessment area. Togo, as well as Benin and part of Eastern Ghana, belongs to the so called "Dahomey gap", which consist of a savanna corridor interrupting the zonal West African rain forest between the Upper and Lower Guinean forests. Paleo records suggest that this situation is due to a dryer climate that established between c. 4 500 - 3 500 cal. yr BP and after c. 1 100 cal. yr BP. These dryer environmental conditions resulted in the establishment of an open savannah with a mosaic of dry semi-deciduous forests with a high number of pioneer tree taxa including the oil palm *Elaeis guineensis* (Salzmann and Hoelzmann, 2005).

Patches of Eastern Guinean forests, themselves part of the Guinean Moist Forests "super" eco-region (Olson and al., 2002) used to be present in the area of Mount Togo in the center west of the country. It corresponds to the ecoregion IV that is described in the HCV assessment report (*Mounts Togo southern zone*). Despite the fact that some blocks of the concession overlapse with the most southern limit of this ecoregion, in the field, forests have disappeared since a long time due to human pressure.

In fact, most of the area proposed for oil palm plantation used to be planted with the same specie from the end of the 19th century to 2003. The rest of the area is made of small-scale agriculture, fallows, savannas and degraded woodlands.

I.2 Peat or fragile soils

No peat or fragile soils have been identified in the area assessed. The area proposed for oil palm development is flat (slope inferiors to 5%) and the degradation rating done by Brabant and al. (1996) goes from "Zero or very slight" to "slight, locally moderate".

I.3 Lands of local communities

Land-uses in the area are mostly small-scale agricultural lands, plantations and fallows, followed by urban area and infrastructures, rivers and waterpoints and finally woodlands and secondary forests.

Order of du 06/02/1974 recognize both legal and customary land-use regimes in Togo. Access to land is generally done through inheritance, but can also be done by gift or legally acted selling. Use rights can be given to migrants temporarily whether it is for free or against annuity (for example for the villages of Adina kope, Seva and Develebe). This use right never become a property right whatever is the length of the use (even on several generations).

Out of the 14 communities identified as concerned by the project, only two (Develebe and Negble kope) have all their territories included in the project area. For the 12 others community, only a fraction of the community land will be impacted by the project.

During the community consultation, all communities have emphasized that, in the current situation they will need lands to continue their agricultural activities.

Except for Negble kope and Develebe, community have also admitted that not all their territories fall within the limits of the project area, and therefore, that it would be possible

to develop both agro-industrial and traditional activities on the territories they are using, in exchange of employment. Even for Negble kope and Develebe, communities have agreed that some portion of their territories could be used for oil palm plantation if that could generate employment for the community.

The FPIC process initiated during this assessment have allowed to identify lands for which community will accept the development of Kalyan's project in exchange of compensation in the form of permanent and seasonal employment and support to development of local infrastructures.

It is also important to note that after the transition from a public to a private status, the area knew a conflict for land use between representatives of lineages (or *Collectivités*) originated from the locality of Gadzagan (close to Fligbo and Votrome blocks) and the state. After several trials, the case has been arbitrated before Togo Supreme Court in 2006. The representatives of the *Collectivités* Agli and Awuya, represented by Ms Acouetey, won the case and have been their land retroceded following justice decision (*Arrêt*) n°11 of 16th February 2006. The assessment team could not be provided with a map of the areas retroceded by any of the public institutions consulted neither by the advocate of the *Collectivités* representatives themselves. Those collectivities have agreed to rent their land to the state in the context of this project.

| HCV | ABSENT | POTENTIALLY PRESENT | PRESENT |
|---|--------|------------------------|---------|
| HCV1: Species diversity | | | |
| HCV2: Lanscape-level ecosystems and mosaics | | | |
| HCV3: Ecosystems and habitats | | | |
| HCV4: Ecosystem services | | | |
| HCV5: Community needs | | | |
| HCV6: Cultural values | | | |

I.4 High Conservation Values

High conservation values have been identified for different categories. For HCV1, *Osteolamus tetraspis*, a crocodylidae classified as Vulnerable (IUCN) is potentially present in the waters of river Zio and its presence should be further confirmed. This river being protected under HCV 4, we will not develop here the protection measures for this specie. Two tree species were also classified as HCV1, *Vitellaria paradoxa* (VU – IUCN, Nationally Protected) and *Parkia biglobosa* (Nationally protected). HCV4 has been assigned to all rivers (permanent and temporary) in the area, due to their importance for most populations that use rivers and streams for water consumption. There is also a potential impact on lake Togo downstream that justifies this classification.

The FPIC process, the socio-economic study and the participatory mapping exercise also showed that more than 80% of the population of local communities relies directly on agriculture for its subsistence. Therefore, all areas listed by local populations as of primary importance for food production were classified as HCV5.

Finally, all areas of cultural importance as described by local populations have been classified as HCV 6 (cemeteries, sacred forest and educational sites).

II Scope of the ESIA and HCV assessments

| Name of the company | Kalyan AgroVet Investments Limited 3rd Floor, 355 NexTeracom Tower, Cybercity, Ebene, Mauritius +971 567 747395 |
|--|---|
| National registration number | 125616 |
| Contact person | Senthil C. R. (Vice-president) <u>senthil@kalyanresources.com</u> General e-mail: <u>ashok@kalyanresources.com</u> |
| Location of assessment | Togo, Province des Plateaux, Prefecture d'Agou |
| Date of assessment | 12/2014 to 04/2015 |
| Size of assessment area | 7,263 ha |
| Current and planned land uses(s) for assessment area | Past: oil palm plantations and small farming Current: small farming, fallows, plantations Planned: oil palm plantations |

II.1 Identification of organization

II.2 Personnel involved in planning and implementation

KALYAN Team under the supervision of Mr Senthil C.R. (Vice-President), will be working closely to implement management best practices responding to RSPO P&Cs and in particular to the management and monitoring recommendations listed in this document and in the HCV and ESIA reports.

| Role | Responsibility |
|--------------------------------------|---|
| Chief Operating Officer | In charge of operational planning, implementation of best practices in the |
| | Plantation. Will be responsible to implement |
| | and report all the management measures |
| | required, including RSPO |
| Project Manager | In charge for monitoring and assessing the activities of project development. |
| | Responsible for reviewing the performance |
| | of the field team in achieving the various |
| | performance parameters following RSPO |
| | P&Cs and the activities committed |
| Agronomist Technical Advisor | Responsible for giving agronomical technical |
| | support to implement best practices for Oil Palm culture and Pest management |
| Finance Manager | Budgeting, Regular payments and cash flows |
| Quality Security Environment Manager | Implementation and monitoring the |
| | effectiveness of health and safety and |
| | environmental procedures |
| Community Relationship Manager | In charge of engaging with the communities |
| | in and around the plantation area and to |
| | resolve any matters (including land |
| | acquisition) arising during the setting up of |
| | the plantation as per the guidelines of the |
| | Government and RSPO |

Table 1 - Personnel involved in planning and implementation

Table 2 - List of contact persons and their responsibilities

| Name | Role and organization | Experience |
|----------------|----------------------------------|--|
| Satish Menon | Chief Operating Officer - KALYAN | He is a seasoned plantation manager with more than 25 years of experience in plantation management and administration. He has experience in handling outgrower agricultural projects in Africa |
| Daouda Nadjari | Community Relationship Manager - | He is a trained Human Resources |

| Amadou | KALYAN | Manager. He is a Togolese citizen and knows the local/tribal languages in the plantation area. |
|----------------------|--|---|
| Deepu Oommen | Project Manager – Contract basis | He is a Post graduate in Agricultural Sciences and MBA with specialization in agribusiness. He has more than 12 years experience in Agricultural Project Management and consultation. |
| Sinnasamy Nadasan | Agronomist Technical Advisor – Contract basis | He is a Post Graduate in Agriculture with more than 30 years of experience in Oil Palm plantation cultivation and administration in various parts of the world |

II.3 Stakeholders to be involved

- Ministry of Agriculture, Livestock farming and Fisheries (MAEP)
- Ministry of Environment and Forest Resources (MERF) Direction of Forest Resources
- National Agency of Environmental Management (ANGE)
- Ministry of Cooperation, Development and Territory Planification (MCDAT)
- Provincial administration: Agou Prefecture
- The representatives of the 14 communities impacted by the project
- The representatives of collectivités Agli and Awuya
- Friend of the Earth Togo (NGO)
- GERAD (NGO)
- GIZ (International Cooperation)

II.4 Reference documents

II.4.1 List of reports

 HCV assessment for Kalyan's Agou plantation – Togo, Province des Plateaux – April 2015. Rémi Duval (provisional license n° ALS14002RD).

- Etude d'Impact Environnemental et Social du projet de palmeraie dans la prefecture d'Agou April 2015. JAT Consulting (Socio Environmental Impact Assessment of the oil palm plantation project in Agou *prefecture*).
- Analyse de la vegetation et de la flore sur l'ancien site de la palmeraie d'Avetonou March 2015. Wouyo Atakpama. University of Lomé. (Assessment of Flora and Vegetation on Avetonou oil palm plantation).
- Rapport social Projet de plantation de palmiers dans la prefecture d'Agou pour la production d'huile de palme March 2015. JAT Consulting. (Social Report oil palm plantation project in Agou *prefecture* for palm oil production).
- Rapport d'étude du contexte faunique pour l'herpétologie, l'ornithologie, et l'ichtyologie dans les zones écologiques correspondant aux anciennes plantations de SONAPH qui part d' Avetonou vers le Zio à Wonougba – January 2015. G. Segniabeto, D. Okangny, A. Delagnon. University of Lomé (Assessment report for fauna and more specifically herpetology, ichthyology and ornithology in ecological areas corresponding to former SONAPH plantation near Avetonou, Wonougba and Zio River).

II.4.2 List of legal documents

- Togolese Constitution of 14 October 1992
- Law n°2008-005 of 30 May 2008 relative to ouline-law on environment in Togo
- Law n°2008-009 of 19 June 2008 relative to Forest Code
- Law N°2007-011 of 13 March 2007 relative to decentralization and local liberties
- Law N°2009-007 of 15 May 2009 relative to the Code Public Health in Togo
- Law n°2010-004 of 14 June 2010 relative to Water Code
- Law N° 2006-010 of 13 December 2006 relative to Work Code in Togo
- Law n° 99-001 of 28 December 1999 relative to Tender organization in Togo
- Law n° 2011-006 relative to Social Security Code in Togo
- Order n°12 of 6 February 1974 relative to agronomical land-use reform
- Decree n°2006-058/PR of 05 July 2006 and its text of application
- 013/MERF of 1st September 2006 and decree n°018/MERF of 09 October 2006) relative to ESIA.

II.4.3 List of property documents

Private owners proof of ownership, purchase and sale.

Justice decision n°11 of 16th February 2006, concerning the land retroceded to *collectivités* Agli and Awuya.

II.4.4 List of partnership documents contracts

Memorandum of Understanding (13th November 2014) signed between Kalyan AgroVet Investments Ltd and the Government of Togo.

Partnership contract between local communities and Kalyan for the use of lands for oil palm development following the FPIC process.

III Location and region description

The concession allocated to KALYAN is made of 7 blocks of sizes going from 48 to 6 280 ha, for a total of 7 263 ha. From an administrative point of view, the concession is mostly located in the *Plateaux* region, with a small patch of the south-east part of the main block pertaining to the Maritime region. In Plateau region, the concession is on the Agou *préfecture* (sub-division of the regions, equivalent to a canton) and in the *Maritime* province, on the *Zio prefecture* (see Figure 1andFigure 2).

| Block name (ex-SONAPH) | Size (ha) | Region | Préfecture |
|------------------------|-----------|----------|------------|
| Agou iboe | 204 | Plateaux | Agou |
| Avetonou 1, 2, 3, 4 | 6 280 | Plateaux | Agou |
| Wonougba 71, 72 | | Maritime | Zio |
| Avetonou 5 | 324 | Plateaux | Agou |
| Fligbo | 203 | Plateaux | Agou |
| Tavié 1 | 63 | Plateaux | Agou |
| Tavié 2 | 48 | Plateaux | Agou |
| Votrome | 141 | Plateaux | Agou |
| TOTAL | 7263 | | · |

Table 3 - Administrative location of the concession

III.1.1 Site history

In Togo, oil palm has always been cultivated for its fruits and sap. The country has a long history of natural oil palm plantations, with activities of production and exportation of oil since pre-colonial times. In 1844, Great-Britain was already importing 21 060 tons of palm oil from countries of the Gulf of Guinea (Daget, 1980; Northrup, 1976).

In 1906, the German had already created a mill in Agou. In 1968, to answer the increasing demand in palm oil, the government has created the SONAPH (Société Nationale pour le Developpement de la Palmeraie et des Huileries – National Society for development of oil palm plantation and transformation mills) by decree N°168 of 04 September 1968. In 1979, a mill with a capacity of 20 tons of FFB/hr is constructed to replace the older one in Agou (annual capacity of 50,000 tons). A project of industrial plantation has also been developed

in parallel with the support of the FED (Fond Européen de Développement – European Fund for Development). From 1968 to 1975, around 5,500 ha of oil palm are planted in the area.

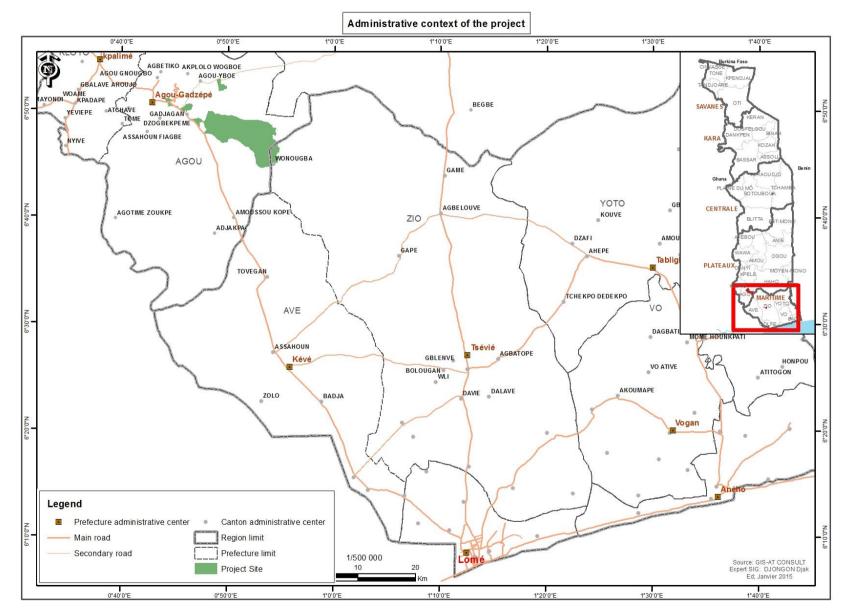


Figure 1 - Administrative background of the project - Final Version

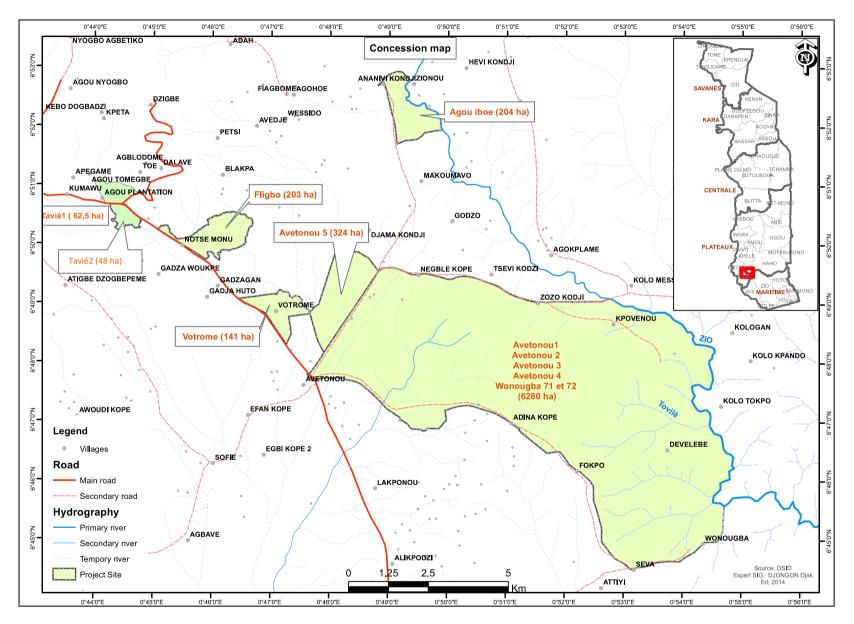


Figure 2 - Agou Concession- Final Version

After 1985, the falling down of the international palm oil market to the benefit of South-East Asia producers has impacted strongly the industrial production in Togo. These difficulties explain why plantations were not maintained, with less and less supply reaching the mills, leading to the dissolution of SONAPH in 1997.

| Block name | Year of planting | Planted area (ha) |
|--------------|------------------|-------------------|
| Tavié | 1970 and 1971 | 81 |
| Fligbo | 1970 | 163 |
| Votromé | 1970 | 213 |
| Avétonou I | 1974 | 201 |
| Avétonou II | 1974 | 206 |
| Avétonou III | 1974 | 298 |
| Avétonou IV | 1974 | 725 |
| Avétonou V | 1975 | 275 |
| Wonougba 71 | 1971 | 591 |
| Wonougba 72 | 1972 | 190 |
| Agou Iboe | 1971 to 1973 | 202 |
| TO | 3205 | |

Table 4 - Year of planting and areas planted by SONAPH

After its dissolution in 1997, the state named a liquidator in order to sell its belonging. SONAPH has been dismantled between the mill (which has been sold to a company named Banamba) and several *Groupements*: those entities are equivalent of cooperatives of ex-SONAPH workers. The *Groupements* have bought the palm trees and were supplying the mill with the Fresh Fruit Bunches (FFB) collected.

After this transition from a public to a private status, the area knew a conflict for land use between representatives of lineages or *Collectivités* originated from the locality of Gadzagan (close to Fligbo and Votrome blocks) and the state. After several trials, the case has been arbitrated before Togo Supreme Court in 2006. The representatives of the *Collectivités* Agli and Awuya, represented by Ms Acouetey, won the case and have been their land retroceded following justice decision (*Arrêt*) n°11 of 16th February 2006.

This decision caused more conflicts in the town of Gadzagan and other villages as the justice decision never defined clearly neither who was included in the *Collectivités* nor the land concerned by the *Arrêt* of 2006. In this regard, the assessment team could not be provided with a map of the areas retroceded by any of the public institutions consulted neither by the advocate of the *Collectivités* nor the *Collectivités* nor the *Collectivités* nor the set teams the set of the *Collectivités* nor *Collectivités* nor the *Coll*

After the trial, *Collectivités* proceeded to the sales of the oil palms and land parcels in the ex-SONAPH concession, resulting in a massive rush to cut the trees and produce palm wine by most of the villagers in the area, between 2006 and 2014 (*pers. co. of all the stakeholders interviewed*). Nowadays, only few oil palm trees remains in the assessment area.

III.2 Land-use and zoning

Land-uses in the area are mostly agricultural lands, plantations and fallows, followed by urban area and infrastructures, rivers and waterpoints and finally woodlands and secondary forests.

III.3 Areas of planting and time zoning

The project promoter plans to develop 6 000 ha of oil palm industrial plantations. The project will be developed in several phases, starting with the nursery in June 2015. Then, the promoter plan to clear around 1 000 ha of land each years, while the land title are secured with local communities, *Collectivités* and the government, respecting the FPIC process.

The mill will then be operational in 2019, starting with a capacity of 10 Mt/hour. The capacity will then be increased to 50 Mt/hour by 2022-2023. The mill will produce CPO, CPKO and Palm Kernel Cake. CPO will mainly be sold in Togo to answer the high demand for oil that is nowadays satisfied by external offer since SONAPH production has stopped.

Palm Kernel Cake will be used in poultry farm that are developed by the promoter in the North of the country. Shell and fiber will be burned in a boiler that will generate energy for the mill. Palm Oil Mill Effluent (POME) will be treated and the promoter will study the feasibility of using treated water for irrigation.

The seeds material used in the plantation will be CIRAD[®] PalmElit *E. guineensis* Deli x La Mé seeds, which provide high resistance to both vascular wilt and water stress.

IV Summary of Management and Planning

IV.1 Environmental and Social Management Plan

The following management and mitigation measures are recommended in order to address the identified social and environmental impacts and make the project socially acceptable and beneficial

- Erosion control on access roads, service roads and planting;
- Avoid contamination of soil and water by residues of herbicides and chemicals;
- Avoid dust emissions on road near communities;
- Monitoring and promotion of biodiversity and protection of fauna species in the area set-asides for this purpose;
- Protection of rivers and watercourse;
- Health and safety;
- Increasing the use of local public services (health, education, public safety).
- Measures to avoid smallholder dependence on income from palm oil production and to increase food security.

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|-----------------------------------|---|--|--|---|
| | | LAND PREPARATION PHASE | | |
| | | Environment | | |
| | Air quality degradation | Sprinkle water on roads during dry season at proximity of villages | Cistern Truck equipped with sprinklers | Vehicle logbook |
| | | Protect buffer zones defined in HCV assessment along rivers and reforest them if needed, with competent NGOs if needed | Buffers protected and reforested Number of tree planted | Biodiversity reporting Implementation report |
| Vegetation removal and windrowing | Vegetation destruction and threats to biodiversity | Maintain Fokpo community forest regeneration project | Area forested | CSR annual report |
| Road network creation | blouiselsky | Protect specimen of Vittellaria speciosa and Parkia biglobossa above 10 cm DBH | Number of trees protected | Biodiversity reporting Implementation report |
| | Destructions | Re-forest buffers and unused areas to restore fauna habitats | Re-forested areas | Biodiversity reporting Implementation report |
| | Destruction / Fragmentation of | Sensitize workers and local communities on hunting regulations and fauna protection | Number of workers trained, villages sensitized | Sensitization report |
| | fauna habitats | Enforce hunting regulations and prohibit hunting to workers in the concession | Fauna monitoring results | Biodiversity reporting Implementation report |
| | Water and soil | Regular revisions of all vehicles to avoid oil spilling | Workshop preventive maintenance plan | Vehicle logbook |
| | pollution | Sensitize drivers and measures to follow in case of oil spilling | Training workshop | Sensitization report |

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|------------|-----------------------------|--|-------------------|--|
| | | Products are available to absorb oil in case of spilling | Absorbent product | Monitor consumption |
| | Landscape modification | Minimize the areas deforested to the minimum, conserve all areas not dedicated for planting. Promote re-forestation along road and villages to avoid a "monoblock" effect | Areas re-forested | Site visit |
| | Soil structure modification | Adjust blade depth and angle (bulldozer) to minimize volume of soils disturbed | - | Implementation report, site visite |
| | | Workers and local comm | nunities | |
| | | Lease / buy parcels belonging to local communities | No complaints | Lease agreements Property proof CSR annual report |
| | | Compensate for perennial crops and buildings destruction | No complaints | Compensation proof CSR annual report Implementation report |
| | Food security | Informed local communities of provisional land preparation schedule so they can harvest their annual crops before the beginning of operations | No complaints | CSR annual report Implementation report |
| | | Implement Communities Development Plan | Plan | CSR annual report Implementation report Agreements with local communities |

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|---|------------------------------|--|--|--|
| | | Realize social projects with communities as agreed during the FPIC process | Number of projects realized and financed | CSR annual report Implementation report |
| | | | Functional infrastructures | Agreements with local communities |
| | | Support the development of agricultural community projects (such as Votrome ZAP) | Number of projects financed | CSR annual report |
| | | | Monitoring of crops production | Implementation report |
| | | Conserve HCV 5 as defined in HCV report | Areas protected as HCV5 | Site visit CSR annual report |
| | | | | Implementation report |
| | Increased vehicle traffic | Install road signage | Panels | Site visit |
| | tranic | Sensitize drivers to traffic regulation | Training session | Training report |
| | Noise pollution | Regular revisions of all vehicles to reduce engine noise | Workshop preventive maintenance plan | Vehicle logbook |
| | STD increase | Organize sensitization campaigns with local NGOs for workers and local communities | Number of campaigns | Sensitization reports |
| | | BUILDING PHASE | · | |
| | | Environment | | |
| Nursery, workshop, warehouse, offices, oil station and others | Air quality degradation | Sprinkle water on roads during dry season at proximity of villages | Cistern Truck equipped with sprinklers | Vehicle logbook |
| building construction | | Regular revisions of all vehicles to reduce air pollution | Workshop preventive maintenance plan | Vehicle logbook |

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|---------------------|--|--|--|-----------------------|
| | Soil fertility degradation and water pollution | Oils and chemical are properly stored Collect used oils and chemicals | Containers equipped with retention tanks | Site visit |
| | | Build retention tank around fuel and oil containers | Tank respecting international norms | Site visit |
| | | Products are available to absorb oil in case of spilling | Absorbent product | Monitor consumption |
| | | Vehicle maintenance is done on an area equipped with an oil separator | Oil separator | Site visit |
| | Waste production | Organize waste collect | Proper garbage available per waste category | Site visit |
| | | Build landfill site respecting international best practices | Landfill site | Site visit |
| | | Sensitize workers to waste separation and recycling | Proper garbage available per waste category | Sensitization report |
| | Workers and local communities | | | |
| | | Install road signage | Panels | Site visit |
| | Increased vehicle traffic | Sensitize drivers to traffic regulation | Training session | Training report |
| | | Enforce traffic regulation, control drivers and apply sanctions in case of law violation | Nbr of sanctions | Nbr of sanctions |
| | STD increase | Organize sensitization campaigns with local NGOs for workers and local communities | Nbr of campaigns | Sensitization reports |
| | | EXPLOITATION PHASE | | |
| Fresh Fruit Bunches | | Environment | | |

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|---|------------------|--|----------------------------|--|
| harvesting, plantation management, pest management and all supporting activities | | Operators are trained to use fertilizers, pesticides and chemicals and are sensitized to the risk of manipulating those products | Training records | Site visit, work accident records |
| | | Annual water and soil test to monitor level of pollution | Test results | CSR annual report Biodiversity report |
| | | Water effluents are treated according to international best practices | Water purification station | Site visit |
| | Water and soils | Vehicle maintenance is done on an area equipped with an oil separator. Oil separators are regularly revised | Maintenance records | Site visit Water test results |
| | pollution | Emergency procedure in case of oil and chemical spilling is known and implemented | Absorbent product | Monitor consumption |
| | | Retention tanks are verified periodically | Verification reports | Site visit Quality, Hygiene and Security service annual reports |
| | | No pesticide neither fertilizers use in buffer zone | Workers training | Training report |
| | Waste production | Only use fertilizer and pesticide for which it is certain that the harm on environment and person is low | Kind of pesticide | Site visit Chemical list |
| | | Keep all record of phytosanitary products application | Treatment logbook | Annual agronomical report |
| | | Identify and classify all waste generated and categorize them (recyclable, dangerous,) | Waste list | - |
| | | Wastes are stored in the landfill following their different categories. There are special areas dedicated to storage | | Site visit |

| ACTIVITIES | NEGATIVE IMPACTS | MITIGATION AND COMPENSATION MEASURES | INDICATORS | VERIFICATION |
|----------------------|---|--|---|--|
| | | of dangerous waste if they cannot yet be recycled | | |
| | | Send annual ESMP implementation reports | Report | Site visit Report |
| | Environment | Realize environmental audits every 4 years | Audit report | Site visit Audit Report |
| | management | Periodic workers sensitization about environment | Training program | Raining report CSR annual report Implementation report |
| | | Workers and local comm | nunities | |
| | | Fair repartition of employment between impacted local communities | Employment plan | Working contracts |
| | Decrease of revenue from agriculture | Support to local agricultural development programs, including small scale agriculture, catering and pisciculture | Nbr of programs | MoU with NGOs |
| | | Conserve and maintain HCV5 as negotiated with local communities | Agreement with local communities No complaints | CSR annual report |
| | Damage to cultural site | Sensitize workers to respect HCV 6 identified | Training record No complaints | CSR annual report |
| | STD increase | Organize sensitization campaigns with local NGOs for workers and local communities | Nbr of campaigns | Sensitization reports |
| | | END OF PROJECT PHASE | | |
| | | Environment | | |
| Site dismantling and | Buildings and | Dismantle all buildings and constructions following international best practices and national laws | Site visit | Implementation report |
| demolition | constructions | Leave all waste that have not been recycled to recycling facilities | Recycling contracts | Implementation report |
| | Water pollution | Treat waters from all retention tanks and lakes | | |

IV.2 HCV Management areas

Identification of threats on HCVs

It is important to identify threats that are carrying weight on the HCVs identified, in order to propose the best management and monitoring recommendations to maintain and/or enhance those values.

The present threat assessment is based on the ESIA that has been undertaken by JAT consulting, the IUCN Threats Classification Scheme (Salafsky and al., 2008), and ZSL threat monitoring protocol (Zrust and al., 2013). Results are presented in chapter IV.3 hereafter.

Management and monitoring recommendations

The purpose of the assessment is of course to identify HCVs present in the project area but most importantly to determine how they will be managed in order to maintain and/or enhance them over time.

Recommendations for managing and monitoring the five HCVs identified are presented in chapter IV.4.

IV.3 Threats on HCV identified

Most important threats are highlighted in bold (based on [Salafsky and al., 2008] and [Zrust and al., 2013]).

| HCV | IUCN CATEGORY | THREAT | INTENSITY |
|-------------------------|---|--|-----------|
| HCV1: Osteolaemus | 2.1.1 Shifting agriculture / 2.1.2 Small-holder farming | Actual: hunting of crocodiles in river Zio; unsustainable | High |
| tetraspis | 2.1.3 Agro-industry farming | agricultural practices increase sedimentation in water, | |
| | 5.1 Hunting and collecting terrestrial animals | destruction of riverbanks, burning of crocodiles nests. | |
| | 7.2.7 Abstraction of surface water (agricultural use) | Project: temporary augmentation of sedimentation in | Medium |
| | 9.3.1 Agricultural & forestry effluents (Nutrient loads) | rivers during land preparation; water eutrophication | |
| | 9.3.2 Agricultural & forestry effluents (Soil erosion, sedimentation) | and contamination by pesticides. | |
| | 9.3.3 Agricultural & forestry effluents (herbicides and pesticides) | | |
| HCV1: V. paradoxa, P. | 2.1.1 Shifting agriculture / 2.1.2 Small-holder farming | Actual: total destruction of tree specimens because of | High |
| biglobosa | 2.1.3 Agro-industry farming | burning, harvesting and charcoal production | |
| | 5.3.2 logging and wood harvesting (Intentional use: large scale) | Project: land-conversion of areas that hosts those | |
| | 12.1 Other threat (charcoal production) | species | Medium |
| HCV4: River and streams | 2.1.1 Shifting agriculture / 2.1.2 Small-holder farming | Actual: unsustainable agricultural practices increase | Medium |
| | 2.1.3 Agro-industry farming | sedimentation in water, destruction of riverbanks | |
| | 7.2.7 Abstraction of surface water (agricultural use) | Project: temporary augmentation of sedimentation in | High |
| | 9.3.1 Agricultural & forestry effluents (Nutrient loads) | rivers during land preparation; water eutrophication | |
| | 9.3.2 Agricultural & forestry effluents (Soil erosion, sedimentation) | and contamination by pesticides. | |
| | 9.3.3 Agricultural & forestry effluents (herbicides and pesticides) | | |
| HCV5: Areas of primary | 2.1.1 Shifting agriculture / 2.1.2 Small-holder farming | Actual: Unsustainable agricultural practices lead to soil | Medium |
| importance for | 2.1.3 Agro-industry farming | exhaustion | |
| subsistence agriculture | | Project: Shifting land-use to industrial agriculture instead of subsistence agriculture | High |
| HCV6: Cultural values | 2.1.3 Agro-industry farming | Actual: No real risk | Low |
| | | | |

IV.4 HCVs management and monitoring recommendations

Please refer to Figure 3 for a map of HCV management areas. *All management and monitoring recommendations identified in this table shall be incorporated in a Standard Operating Procedure system prior to the beginning of activities.*

| HCV | Management recommendations | Monitoring recommendations |
|---------------------------------------|---|---|
| HCV1: Osteolaemus tetraspis | Protection of riverbanks and water quality (see HCV4) Community environmental education: respect of hunting legislation (hunting period, size of capture) Partnership with NGOs, administrations (MERF) for poaching control | (See HCV4) Fauna survey dedicated to identify if Osteolaemus tetraspis is really present in Zio river and annual crocodile population monitoring reports Communities environmental training minutes Partnership documents with interested organizations |
| HCV1: V. paradoxa, P. biglobosa | Protection of all specimens above 10 cm DBH before land-conversion (marked by paint, 5 m circular buffer) Plant tree specimens in river buffer zone if appropriate | Maps of trees protected (GIS) Regular monitoring that there has been no illegal harvesting |
| HCV4: River and streams | Delineate buffer prior to land conversion and train bulldozer drivers to respect them Strict respect of buffer around each banks of rivers: Primary river (Zio): 100 m Secondary river: 50 m Temporary river: 25 m Buffer should be both forested and herbaceous to minimize rainwater surface flows and maximize sediments and chemical absorption (these recommendations are based on Togolese legislation and recognized international best practices [Chappel et al, 2004 ; Chappell and Thang, 2007; Syversen and Bechmann, 2003]) River protection buffers should be planted with local species Protect buffers from illegal harvesting and agriculture encroachment | Map of final river buffers (GIS) Regular buffer control to check no illegal harvesting or encroachment happen Regular monitoring of water physico- chemical quality Annual monitoring of soils and foliar chemical compositions to optimize fertilizer consumption Monitoring of fertilizer/pesticides consumptions |

| | Respect of RSPO recommendations for fertilizer, pesticide and herbicide use. Best practices for pest management to minimize pesticide consumption and, when possible, use biological pest control techniques Strict protection shall be applied to buffers, that should be replanted with local species | |
|---|---|--|
| HCV5: Areas of primary importance for subsistence agriculture | For each local communities, prior to commencing any operations, the FPIC process should be continued to delineate the areas already identified: Villages designate a team that will, under promoter control, delineate the areas that shall be conserved for agriculture (i.e. with poles); After a certain period (i.e. one week), if the limit is accepted by all, documents shall be established with each community to describe and sum up areas allocated for oil palm planting, subsistence agriculture and which are the compensations (jobs, infrastructures); Promoter shall identify the best season to run land-clearing together with local communities, so they can harvest their perennial crops; Crops, housing and other items that are destroyed during land clearing shall be compensated following Togolese legislation and ESIA conclusions; Jobs should be distributed equitably between each communities impacted by the project based on their population and areas impacted; A mutually agreed conflict resolution procedure shall be developed and explained to local populations; There should be a ritualization of the agreements signing and starting of field work. Strict protection shall be applied to areas identified for subsistence agriculture. Only if the promoter manage to improve agricultural practices in HCV5 areas (i.e. through partnership with NGOs or Government such as for Votrome ZAP) to develop agricultural yields AND that he can reach a new agreement respecting the FPIC process with concerned communities, THEN limits and superficies of HCV5 could be modified to extend oil palm plantations. The promoter shall demonstrate that the change in HCV5 limits does not impact the food security of local populations. | Maps of final agreement for HCV5 areas (GIS) Community Liaison Officer regularly consults community representatives to understand their problems regarding agreements with Kalyan and prevent conflict |
| HCV6: Cultural values | For each local communities, the FPIC process should be continued to delineate the areas already identified as cultural values: Communities designate a team that will, under promoter control, delineate the areas that shall be conserved for cultural purpose (i.e. with poles). Strict protection shall be applied to areas identified. Access shall be authorized to local communities | Maps of final agreement for HCV6 areas (GIS) |

IV.4.1 HCV and HCV management maps

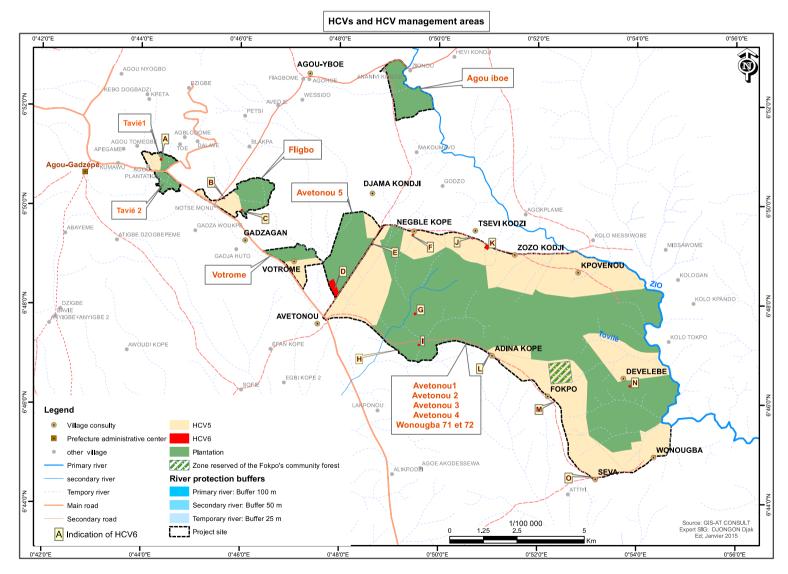


Figure 3 - Summary of HCVs and HCV management areas – Draft Version

IV.5 Summary of findings and recommendations for HCVs identified

| HCV | Superficies (ha) of HCV management areas | % |
|------------|---|------|
| HCV 1 | To be defined for Vittelaria paradoxa, Parkia | |
| | biglobosa (punctual values) | - |
| | Area for protection of Osteolamus included in HCV 4 | |
| HCV 4 | 253.1 | 3.5 |
| HCV 5 | 2832.9 | 39.1 |
| HCV 6 | 24.0 | 0.3 |
| Total HCV | 3110.0 | 42.9 |
| Plantation | 4144.0 | 57.1 |
| TOTAL | 7254.0* | 100 |

Table 5 - Summary of areas proposed for protection and planting

*: There are some discrepancies in this table for the total area (7 254 ha instead of 7 263 ha in the legal acts) that are due to the different GIS software used. It represents less than 0,1% of the total area an is not considered significant

The project proposed by Kalyan fall within a national context where there is a very high pressure on natural resources due to population density and small-scale farming practices. It is widely accepted that most of the exceptional biological values at the country level (flora, fauna and ecosystems) are present in the remnants of Protected Areas. Nevertheless, in this situation, even small patches of intact ecosystems or small fauna populations can be of national/regional importance.

This is why the area proposed by the promoter has been carefully selected to avoid important damages to environment. Most of the concession will be established on former SONAPH oil palm estate, that has been exploited from the early 70's until 2004.

This project is actually the only oil palm project in Togo, which aims to reach the independence at country level for oil production. It is not located on peat soils and will not deforest intact forest or landscape-level ecosystems and mosaics.

The HCV assessment, undertaken by a team of 10 experts from December 2014 to April 2015, allowed identifying 4 HCVs and 1 Potentially Present HCV.

IV.5.1 Environmental values

Human pressure has left no intact ecosystems in the project area and environmental values are considered very limited. The site was not found to be significant in term of botanical or fauna importance.

All watercourse and water points shall be protected in order to avoid contamination of water used by local populations and destruction of *Osteolamus* habitat. Further studies should confirm/reject the hypothetical presence of this crocodile.

Finally, *Vittelaria* and *Parkia* trees above 10 cm DBH shall be protected during land conversion.

IV.5.1.a Management and monitoring recommendations

The key element for protection of environmental values in Agou plantation project will be the **management of buffer areas around watercourses**. Indeed, the last patches of less disturbed forests are found around rivers and streams, which host few adult specimens of *Vittelaria* and *Parkia*. Zio river is also the potential *Osteolamus* habitat.

Restoration of forested buffers (gallery/riparian forests) around river and streams (even seasonal) will allow to maintain and enhance HCV 1 and 4. Preserving those buffers will play an important function in maintaining rivers flows and their chemical quality.

The expected results are that i) water remains available for local population consumptions and ii) downstream aquatic fauna habitats are preserved for contamination and eutrophication.

Buffer network will also allow maintaining connectivity for wildlife that will remain in the concession. It is recommended that the whole concession should be preserved from hunting, acting as a sanctuary for wildlife.

IV.5.2 Social values

It has been repeated during all this report that under actual conditions, an important part of the site shall be reserved for local communities subsistence activities. During the participatory mapping each community has designated areas so they can continue to cultivate.

IV.5.2.a Management and monitoring recommendations

Assessment team has started a process to roughly delineate the HCV 5 management zone. Kalyan shall finalize the FPIC process by i) determining precisely the limits between areas possible for planting and areas that shall be reserved for subsistence agriculture purposes, ii) signing written agreements which designate clearly the areas authorized for planting, the employments benefits and the compensation for each community. The document should also include a mutually agreed conflict procedure.

The same process shall be applied to identified HCVs 6.

IV.6 Conclusion

Due to its past history of oil palm plantation and the absence of significant environmental values, the area is considered suitable for oil palm plantation, as long as it is developed responsibly respecting the recommendations highlighted in this report.

The assessors have recommended to the promoter to protect in a first time nearly 43% of the proposed project area for the purpose of protection of environmental and above all social values.

HCV 4 and 6 identified shall be considered as "no go" areas in all conditions, except in the case of road construction for HCV 4.

HCV 5 is of special importance for the subsistence of local population. Nevertheless, local projects in the surroundings of the project area (ZAP) have demonstrated that it was possible to enhance agricultural yields and thus provide better revenue from agriculture with fewer lands. If, and if only, the promoter can replicate these projects and demonstrate that subsistence activities can be maintained/enhanced with fewer lands, then, it would be possible to renegotiate on a case-by-case basis the limit and extent of HCVs 5. The re-designation process shall imperatively be done respecting an FPIC process.

The promoter shall develop an appropriate Standard Operating Procedure system which will include the recommendations of this report to ensure that the environmental and social values identified are maintained and enhanced.

Finally, this project, only of its kind in Togo, does not pose major threats to environment, in fact, by providing stable employment to local communities it could reduces pressure on environment.

| Signed-off by HCV assessor | Acknowledgment of internal responsibilities by Kalyan Agrovet Investments Ltd |
|----------------------------|---|
| Date: (| 05 May 2015 |
| | I understood and, being the representative of this company, I agree with this report |
| Rémi DUVAL | Ashok GUPTA |
| www.Forests-and-People.net | Director |

V Internal responsibility

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