GROW Liberia – Community Oil Palm Outgrower Scheme: Operational Plan

15 July 2016
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>ASI</td>
<td>Adam Smith International</td>
</tr>
<tr>
<td>CIRAD</td>
<td>French Agricultural Research Centre for International Development</td>
</tr>
<tr>
<td>CPO</td>
<td>Community Producer Organisation</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organization</td>
</tr>
<tr>
<td>CSPO</td>
<td>Certified Sustainable Palm Oil</td>
</tr>
<tr>
<td>DFI</td>
<td>Development Finance Institution</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EPO</td>
<td>Equatorial Palm Oil</td>
</tr>
<tr>
<td>ESIA</td>
<td>Social and Environmental Impact Assessment</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FFB</td>
<td>Fresh Fruit Bunches</td>
</tr>
<tr>
<td>FMO</td>
<td>Netherlands Development Finance Company</td>
</tr>
<tr>
<td>FPIC</td>
<td>Free Prior Informed Consent</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GoL</td>
<td>Government of Liberia</td>
</tr>
<tr>
<td>GROW</td>
<td>Support to the Devt of Markets and Value Chains in Agriculture in Liberia</td>
</tr>
<tr>
<td>GVL</td>
<td>Golden Veroleum Liberia</td>
</tr>
<tr>
<td>Ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>IDH</td>
<td>IDH Sustainable Trade Initiative</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IRHO</td>
<td>Institut de recherche pour les huiles et oléagineux</td>
</tr>
<tr>
<td>LOPM</td>
<td>Liberian Oil Palm Management Company</td>
</tr>
<tr>
<td>MOPP</td>
<td>Maryland Oil Palm Plantations</td>
</tr>
<tr>
<td>NBC</td>
<td>National Bureau of Concessions</td>
</tr>
<tr>
<td>NICFI</td>
<td>Norway's International Climate and Forest Initiative</td>
</tr>
<tr>
<td>OER</td>
<td>Oil extraction rate</td>
</tr>
<tr>
<td>OPOSITC</td>
<td>Oil Palm Out-Grower Scheme Implementation Technical Committee</td>
</tr>
<tr>
<td>PPA</td>
<td>Production Protection Agreement</td>
</tr>
<tr>
<td>RSPO</td>
<td>Roundtable on Sustainable Palm Oil</td>
</tr>
<tr>
<td>SDPL</td>
<td>Sime Darby Plantations Liberia</td>
</tr>
<tr>
<td>SPV</td>
<td>Special Purpose Vehicle</td>
</tr>
<tr>
<td>tph</td>
<td>Tonnes per hour</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
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1 The Project

1.1 Background

The Government of Liberia (GoL) National Oil Palm Export Strategy (2014-2018) identifies oil palm exports as key to economic growth, which aims to establish the Liberian oil palm sector as a leading contributor to the national economic transformation agenda through export development in an inclusive and sustainable manner.

Between 2009 and 2010, the GoL entered into oil palm concession agreements with four multinational companies: Golden Veroleum Liberia (GVL), Sime Darby Plantations Liberia (SDPL), Maryland Oil Palm Plantations (MOPP) and Equatorial Palm Oil (EPO). These concessions utilize a nucleus/outgrower model and began operations in 2010/11.

Within these concession agreements, there is a commitment to develop one sixth of the concession under an oil palm outgrowers programme. The concession agreements indicate that the GoL is responsible for identifying financing for the outgrower schemes.

The National Bureau of Concessions (NBC) was established in 2015 to monitor and evaluate compliance with concession agreements. It is NBC’s responsibility to design, finance and support the delivery of the outgrower component of concession agreements. This report describes the chosen pilot scheme to commence this outgrower strategy. It follows a Feasibility Review (“Feasibility Review of a Proposal to Establish a Liberian Oil Palm Outgrower Scheme”, May 2016, LTS International & Greenstar Resources) undertaken by NBC’s technical advisor, GROW (Support to the Development of Markets and Value Chains in Agriculture in Liberia).

The plan, structures and the physical and financial assumptions used in this operational plan are those used in the Feasibility Review. The plan describes the operational approach, development costs and associated project requirements of training, technical assistance, infrastructure improvements and for the community-based and project management organisations that will be needed to administer and manage the project and its finances.

1.2 Description

The proposed oil palm outgrower pilot project aims to plant five sites in three counties involving five community groups and covers 3,200 hectares, developed in accordance with the concession agreements of GVL and SDPL (Table 1). GVL and SDPL both plan to operate within the guidelines of the Roundtable on Sustainable Palm Oil (RSPO) as fully-certified members and to market Certified, Sustainable Palm Oil (CSPO), which requires outgrowers
also to comply with RSPO standards as suppliers of fresh fruit bunches (FFB) to their newly constructed palm oil mills.

Table 1 Proposed Pilot Project Areas

<table>
<thead>
<tr>
<th>Concessionaire</th>
<th>County</th>
<th>District</th>
<th>Location</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sime Darby</td>
<td>Grand Cape Mount</td>
<td>Garwula</td>
<td>PAC</td>
<td>600ha</td>
</tr>
<tr>
<td></td>
<td>Grand Cape Mount</td>
<td>Garwula</td>
<td>Zodua</td>
<td>900ha</td>
</tr>
<tr>
<td>GVL</td>
<td>Grand Kru</td>
<td>Trenbo</td>
<td>Sorroken</td>
<td>500ha</td>
</tr>
<tr>
<td></td>
<td>Sinoe</td>
<td>Kpayan</td>
<td>Tartweh</td>
<td>700ha</td>
</tr>
<tr>
<td></td>
<td>Sinoe</td>
<td>Kpayan</td>
<td>Numopoh</td>
<td>500ha</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>3,200ha</strong></td>
</tr>
</tbody>
</table>

1 Subject to community discussions, agreement and land assessments

1.3 Operational Model

The Feasibility Review proposes a scheme where the pilot communities PAC, Zodua, Numopoh, Tartweh and Sorroken are developed by the companies until any financing applied to the pilots, in whatever form, has been repaid or is no longer a community or farmer liability. In this development period, community members can work on the plantations and will be trained in technical and management skills by the companies. When the financing has been repaid, four of the community pilots continue to be community plantations, managed as before but by the communities themselves. The fifth pilot at Sorroken have themselves proposed that they will allocate their pilot area to individual families/farmers to own and manage as small (5ha) oil palm farms but only after loans have been repaid.

The request by all pilot communities that the companies develop and operate the pilot plantations until debt-free means that operational comparison of community-owned plantations and individual family owned plantations cannot be made until after repayment of loans, indicated to be after 17 years (2035). This compares with 6-7 years in SE Asia, where palms are more precocious and higher yielding.

A potential pilot scheme financing model proposed by IDH (Sustainable Trade Initiative) involves providing a loan guarantee in exchange for an agreement between the community and IDH to protect an area of threatened natural forest. This Production-Protection Agreement (PPA) does offer a guarantee to loan providers and therefore should both encourage Development Finance Institutions (DFIs) to consider loans for the pilot phase but also, depending on the amount covered by the guarantee, to offer more attractive terms.
On the ground implementation is planned to commence with land clearing from November 2016. It will be a challenge to satisfy the pre-conditions before then, especially the land titling obstacle and to raise the necessary finance including the financiers’ own due diligence and approvals process.

The Project is proposed to be managed and financed through a newly-incorporated company, the Liberian Oil Palm Management Company (LOPM) which will oversee the financing, establishment and operation of the pilot scheme. The pilot oil palm communities will also establish community organisations to liaise with the management company on oil palm development, loan administration, Fresh Fruit Bunches (FFB) pricing etc. and the management company will represent these community-based organisations with GoL, GVL, SDPL and other stakeholders.

The Financial Plan in the excel document that accompanies this report details the practical operations and assumptions of the scheme. These determine:

1) The resources needed and the timescale over which it is feasible to implement the project

These include human resources, farm inputs and field mechanical operations, fruit tonnages and transport requirements.

2) The cost of developing an outgrower oil palm farm and the costs of maintaining and harvesting the palms throughout their economic life

Key costs are engineered from data provided by the two operating companies, SDPL and GVL, adjusted for local conditions where necessary. These costs will determine the baseline investment cost before sales revenue of a farmer’s oil palm fruit bunches.

3) Yields, selling prices and viability

A farmer’s income is driven by the yield of their FFB. In West Africa, the first bunches appear in year three after planting and then the yield rises slowly to a peak in about year eight after planting. This yield profile has a major bearing on tonnages sold, revenue and therefore viability of the oil palm plantation.

A characteristic of nucleus/outgrower schemes is the reliance on the nucleus operator to support the outgrower with technical advice, inputs, tools and a market for production. In oil palm, the farmer sells FFB to the nucleus company’s mill at a price that is related to the prevailing world market price and adjusted for the costs of processing and distribution. An important aspect of outgrower viability is the FFB price formula used and to ensure that it is fair and transparent.
The outgrower project is predicated upon financial viability of small-scale oil palm production in Liberia. While oil palm outgrower schemes exist and can be successful in other parts of the world, they are generally in regions with high yield potential and often with good agricultural support infrastructure, neither of which exists in Liberia. Hence the first goal of the modelling exercise is to determine whether small-scale oil palm is profitable and, if so, the degree to which it’s cash flows can provide an income for the farmer while also repaying loans taken out to finance the development costs. This calculation is fundamental to the whole industry.

4) The required scale of production to provide an income sufficient to maintain a family

It has been suggested that a farm income of $3,000 per year should be targeted for a single farmer or $6,000 for a couple to support a family. This is a premium over the minimum rural wage (but remembering that the oil palm farm might not be a full-time occupation) and is after all costs of maintaining the planted area and servicing any loan taken out to establish the farm.

However, there is a limit to the area of plantings that one farmer can manage, assuming he does the fieldwork and harvesting himself. The model will demonstrate whether a farmer can produce this income from the maximum area that he can manage.

5) Whether the cash flows are sufficient to service a loan

It is proposed that finance is raised by GoL through a Special Purpose Vehicle (SPV), Liberian Oil Palm Management Company (LOPM), to on-lend to farmers with repayment commencing after a grace period extending from drawdown until first harvest when cash flows can begin to service, or part-service, the loan while also leaving a surplus to support the farmer and their dependents. The degree to which cash flows from the oil palm plantation can service the loan depends on the “cost” of the loan, i.e. the interest charged, and the term of the loan, i.e. the period over which the borrower has to pay back the sum borrowed and the interest due. The financial plan assumes a long term loan with an interest charge of 3%.

The Feasibility Review also recommends that the SPV (LOPM) is also a dedicated management company for the Project.
2 Context

2.1 Historical Context of the Oil Palm Industry

The oil palm of commerce, *Elaeis guineensis*, is believed to be indigenous to West Africa (the specific name, *guineensis* shows that the first specimen described was collected in Guinea, West Africa). There is a general consensus that commercially planted palms in Indonesia, Malaysia and other South East Asian locations were derived from a small number of introduced West African palms.

The history of oil palm as a commercial crop is rather short, dating back to 1807 on the West African coast. It came to the East via the Island of Mauritius in 1848, to Indonesia (the Botanical Garden at Bogor) where four seedlings of four West Africa palm varieties were planted. Oil palms spread from Bogor to other parts of Indonesia, especially Sumatra, and on to Malaysia in particular, initially as ornamental palms lining avenues. The African oil palm has also been taken to central and South America where it was first cultivated in Brazil, and later to Colombia and other neighbouring countries.

The first plantations were established in Indonesia early in the twentieth century and in Malaysia a few years later. Although African villagers had cultivated semi-wild groves for centuries, industrial scale plantations in Africa were only developed following the successes in the Far East.

The most important development in the recent history of the crop was the discovery of the inheritance of shell thickness. The recognition that the *tenera* fruit form was a hybrid between the *dura* (thick shell) and *pisifera* (shell-less) forms allowed *tenera* planting material to be produced by controlled pollination of female inflorescences on *dura* palms with *pisifera* pollen. The *tenera* has a much thicker oil-bearing mesocarp than the *dura*, and so yields some 30% more oil at no extra cost. This transformed the profitability of the crop, driving rapid expansion of plantings from the 1960s onwards.

Extensive breeding and agronomic research has been undertaken by institutes such as CIRAD in France, the one-time West African Institute for Oil Palm Research (WAIFOR) and also by private plantation companies. As a result, oil yields have more than quadrupled since the early days. Today, for example, the best fields in Indonesia give peak yields of 30-35 tonnes FFB per hectare per year, with an oil extraction rate of 25%, to give over 7.5 tonnes oil/ha per year, together with 1.5 tonnes of kernels. In West Africa, commercial yields are much lower, under 20 tonnes FFB per hectare per year as a result of its less suitable climate.
2.2 Markets and Prices

2.2.1 European Market

Palm oil is by far the most significant vegetable oil imported into Europe. The oil is used in large volumes by the food and personal care industry due to its low production costs compared to other oils. This has contributed to an increase in European consumption by which mostly large players have benefited from market expansion. The certification of traceability and production standards is becoming a primary consideration of European buyers and GVL and SDPL plan to address this trend through the production and sale of CSPO. While there is no confirmed price premium for CSPO over crude palm oil (CPO), it does open the market up to Liberian oil and is likely to stay open as long as certification of the country’s oil remains in place.

The last 20 year run of prices shows an annual rise of 2.6% per annum in nominal terms. The outgrower scheme financial projections are set within a constant pricing environment of US$750/tonne (CIF Rotterdam), being the latest available price as at the date of this plan (Figure 1). This translates into an ex-mill price of approximately US$650/tonne on which the mill gate FFB price to farmers is based.

Figure 1 Monthly Prices of Crude Palm Oil (US$/tonne CIF Rotterdam)

![Monthly Prices of Crude Palm Oil](Source: Greenstar Resources)

2.2.2 ECOWAS Market

The Economic Community of West African States (ECOWAS) region is a net importer of palm oil. The dominant importer of palm oil and palm oil substitute oils and fats (e.g. soybean oil, tallow) is Nigeria with a large population and established food manufacturing industry. Liberian palm oil has a competitive advantage when exported within the ECOWAS region as it should be exempt from import duties (35% in Nigeria) whereas the main producing countries of Indonesia and Malaysia incur full duties.
ECOWAS producers will still have to pay non-duty importation costs (cesses, broker’s fees VAT) totalling approximately 10% but benefit from the consistently high and stable prices in Nigeria.

Production of palm oil is rising in Nigeria as large scale commercial plantations are established or expanded and come on stream. In the long term, premium prices cannot be guaranteed unless demand continues to exceed domestic supply. Hence the financial viability of the outgrower scheme is underpinned by European market prices rather than Nigerian prices (Figure 2).

**Figure 2 Monthly Prices for Crude Palm Oil (US$/tonne Nigeria)**

![Figure 2 Monthly Prices for Crude Palm Oil](source: Greenstar Resources)

2.3 Climate and Soils

It is generally known that the following conditions promote maximum palm growth:

- Rainfall of 2,000mm, distributed evenly over the year (i.e. with no very marked dry season). This partly accounts for yields in South East Asia (with no marked regular dry season) outcompeting those achieved in West Africa. It has been found that adequate soil moisture is more important than natural soil fertility, as nutrients can be supplied artificially.

- Constant sunshine amounting to at least five hours per day over all the months of the year and as much as seven hours per day during some months. Differences in incoming radiation account for much of the rest of the difference in yield between West Africa and the Far East and Pacific Islands.

- A mean minimum temperature of 20-23°C and a mean maximum temperature of 28-32°C which is peculiar to tropical countries is best suited. If the temperatures falls below this, particularly at night to say below 19°C, bunch development is affected and yield reduced. Growth in young seedlings stops at temperatures below 15°C.
- Oil palm can be grown on a wide range of soils, the best being the coastal alluvial clay, riverine and coastal alluvial and soils of volcanic origin.

Table 2 presents rainfall data for Liberia. Liberia has a slightly better rainfall pattern than some countries in the West African oil palm belt, stretching from Sierra Leone in the west to Cameroon and DRC in the east. Although total annual rainfall seems high, higher even than most of Malaysia, it suffers from three months of soil moisture deficit because of the dry season. In this period the palms cannot access soil moisture and so cannot take up nutrients. In the months of heavy rainfall, July to October, cloud cover reduces light penetration and hence the photosynthetic capacity of the oil palm. These two factors reduce the yield potential of West African palms to a much lower level than is generally achieved in SE Asia, meaning that Liberian plantations might yield about 70% of SE Asian plantations and Liberian oil palm smallholders similarly lower than their SE Asian counterparts.

**Table 2 Liberia rainfall in mm**

<table>
<thead>
<tr>
<th>Location</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>Greenville</td>
<td>142</td>
<td>155</td>
<td>215</td>
<td>211</td>
<td>546</td>
<td>673</td>
<td>266</td>
<td>386</td>
<td>602</td>
<td>747</td>
<td>331</td>
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<tr>
<td>Harbel</td>
<td>31</td>
<td>54</td>
<td>136</td>
<td>160</td>
<td>279</td>
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<td>444</td>
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<td>621</td>
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<td>188</td>
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<td>Monrovia</td>
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<td>442</td>
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<td>450</td>
<td>307</td>
<td>260</td>
<td>62</td>
<td>2,954</td>
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</table>


Low sunshine hours (average 33% sunshine in Liberia compared to 63% in Padang, West Sumatra), also restricts the yield potential of outgrower plantings in Liberia. When assessing the cash-generating potential of the outgrower project these factors have been taken into account.
3 First Steps

The Liberian outgrower scheme should not be initiated until some launch elements are completed:

1. That the community has expressed a strong desire and has given its free, prior, informed consent (FPIC) to undertake the project;
2. That the community can demonstrate ownership of the community plantation land;
3. There is a decision-making community body that is agreed by the community during the FPIC process;
4. That the physical and environmental context of the land satisfies the RSPO criteria for new developments, especially with regard to carbon stocks and the proposed land’s conservation value;
5. A Social and Environmental Impact Assessment has been undertaken and approved by the Environmental Protection Agency (EPA);
6. There is a financing plan that confirms the project remains financially viable based on realistic yield estimates;
7. The community finds the level of risk and financial commitment acceptable;
8. That finance has been raised by the GoL or with GoL participation in accordance with the concession agreements, for planting, technical assistance, scheme management and governance and necessary infrastructure improvements.
4 Project Set-up

4.1 Land titling

A full title may be a pre-condition to funding the pilot scheme because lenders may require tradeable collateral. This needs to be explored with potential funding agencies, some of whom may be comfortable with clear and non-disputed right to the land rather than a full freehold or leasehold title.

The main company plantations are registered as ratified concessionary agreements. Areas of interest have been submitted to the Legislature. Within these areas of interest the companies, communities and Government can work out areas that the companies would develop.

For the proposed outgrower pilot lands there will be agreement by the communities to develop community-owned plantations but there will not be a title deed for the land on which the palms are planted unless the communities apply.

The titling process will:

1. Gain full agreement with community for specific land area;
2. Check to ensure there are no existing private titles nor tribal certificates within the identified area;
3. Apply for private title and survey/mark boundaries;
4. Gain Presidential approval for survey and conversion to a title.

This process can be lengthy but it is possible to receive a legal title in a few months. The Lands Commission has indicated it could offer to “fast track” the process where possible.

Note that tribal certificates are common in the rural areas. They confirm user rights but do not confer legal ownership so cannot be presented as collateral to a lender.

4.2 RSPO Compliance

For any outgrower scheme to be RSPO compliant, three components must be in place:

- Firstly, that the new developments are agreed by the communities and that this does not result in the destruction of primary forests, high conservation values (ecosystems, habitats for biodiversity and communities), and meets national legal requirements;
- Secondly, that there is a management body to ensure that farm operations are monitored to ensure that there is low environmental impact, in a safe work
environment and minimal risk to public safety. This would be a continual learning process based on an adaptive management framework;

• Finally, that there is a certification and audit programme to ensure that RSPO membership is maintained.

In order to visualise how outgrowers could be RSPO certified, a conceptual process has been described below that guides a multiple-stage process from planning to development (note: the operational and certification components have not been outlined). The idea is that if the process can be implemented it can be used to provide evidence that the RSPO principles have been met. The process is designed to accommodate key principle requirements of the RSPO, namely:

• Free Prior and Informed Consent (FPIC);
• Community Participation;
• New Development Plans;
• Public Notification;
• Dispute resolution.

The most efficient way to plan and develop an outgrower scheme would be through the companies themselves. It is also unlikely, that the outgrower schemes would be initiated outside the concession areas. Thus, the assumption is that the company will be the primary driver for the scheme but will operate under a set of guidelines and rules. These guidelines and rules could be established by a third-party appointed by the Government. The third-party would play a technical and supervisory role to the scheme to ensure that the rules and guidelines are being implemented, provides the management review and audit controls necessary to ensure that the implementation and accounts are correct and accurate. At the community-level, the “Community Producer Organisations” (CPO) (or its equivalent) would act as the decision-making body for the scheme (membership, benefit share, management, etc.).

4.3 Environmental and Social Impact

A separate Environmental and Social Impact Assessment (ESIA) will be needed for each pilot area even if incorporated into a single project. Where GVL and SDPL manage the community plantations and employ a workforce, it is assumed that the companies’ own Environmental Management Programme and the Community Development Action Plan, part of their own ESIA, will guide the operations.
4.4 High Conservation Values and High Carbon Stocks

4.4.1 Identification

*High Conservation Values* (HCVs) are determined through landscape-level assessments conducted by HCV Resource Network Licenced Assessors. The licensing scheme was introduced in 2013 and was designed to ensure that assessments conform to common guidelines and quality standards. *High Carbon Stocks* (HCS) is being promoted by the High Carbon Stock Approach ([www.highcarbonstock.org](http://www.highcarbonstock.org)) and High Carbon Stock Study ([www.carbonstockstudy.com](http://www.carbonstockstudy.com)) as a method to demonstrate commitments towards zero deforestation. For HCS, there is no single agreed methodology that is being promoted by the RSPO or by the oil palm producers although efforts are under way to seek convergence on the two schemes now in general use.

Looking ahead to improve the availability of information, areas for future work could include:

- Adopting a given methodology for HCV and HCS to be applied to all concession-holders;
- Conducting concession-wide assessments, in collaboration with the Government, to identify HCV and HCS at the concession level;
- To identify priority regions, based on HCV and HCS maps, for conservation protection and management.

4.4.2 Exclusions

At a conceptual level, with conservation priority maps (essential areas outside of protected areas) or HCV and HCS maps, it is possible to establish a rule that no outgrower scheme will be allowed within such areas.

4.4.3 Management

The concessionaires’ commitment to deforestation-free development and sourcing does not foresee the management of the HCV HCS areas that are set aside. No entity is currently managing the HCV/HCS forests in the gross oil palm concessions, and with increased estate development, road access to the area and population growth, deforestation and forest degradation become increasingly likely.

There are few, to no, working models where communities have entered into agreements to protect forests in exchange for aid. In Borneo for example, communities are offered health packages (visits) for communities with low illegal forest encroachments in a national park. A similar model is being piloted by Conservation International in Liberia in a Conservation...
Agreement and related projects to which ArcelorMittal and participating communities have signed up (GVL Sustainability Advisor, Pers. Comm.).

If a similar approach is adopted, linked to the outgrower schemes, it might look like this:

- Communities identify town-needs collectively;
- Communities identify target development needs (budgets);
- Communities are made aware of the projected earnings from outgrower scheme and community development fund;
- Shortfall in funding is targeted for conservation-linked aid; which could be in the form of an agreement. The agreement is to provide the aid IF there is a little to no forest-change for a defined area (this could be verified by Global Forest Watch or other methods);
- After a period of review, the offer is again presented to the community to cover new development needs.

4.5 FPIC Guidelines

Prior to this assignment, a major Community Needs Assessment (CNA) study has just been completed by GROW/NBC. The needs assessment covered 48 communities: 27 communities in the GVL concession area in south-eastern Liberia and 21 communities in SDPL concession area in western Liberia. The key findings of the CNA in relation to the development of an outgrower scheme in these pilot areas are as follows:

- The CNA revealed community members’ willingness to be involved in Oil Palm production but expressed the following challenges: capital, training and extension services, tools and mechanized equipment, poor road networks, and lack of storage and processing facilities;
- Results from Focus Group Discussions and Key Informant Interviews revealed that communities have no formal organization in place to represent them in the development, negotiation, and implementation of the terms and conditions of an outgrower scheme. Communities were keen to know more and understand financing options. It has been suggested that there should be some form of community capacity building institution set up. GVL has been discussing a similar idea with SDI for some time. The main challenges are that it should be a national scheme, rather than tied to one company, and that it needs to be funded in a manner that ensures arm’s length independence from interested parties such as concessions and advocacy NGOs.

For the implementation of outgrower scheme, the following FPIC process stages will need to be followed (See Appendix A for FPIC SOP Process).
4.5.1 Stage 1 – Establishing Consent

For the FPIC process, scoping or introductory meetings are held at the district or clan level to identify the towns that are relevant to the consultations.

The first principle is to ensure that there is a cohesive or natural grouping of community members that can promote more effective discussions and decision-making. The “town” level appears to be the most appropriate level, or a collection of smaller towns (or where there is kinship that unites them). It is for the community to decide on the appropriate level of community and the type of representative body that they prefer.

An introductory meeting should be proposed and notified to the general community. Effort should be made to ensure that all community members who wish to participate in meetings and consultations are present whether or not they have any formal leadership or decision making role in the community. It will be for the community to decide whether they wish to have non-resident community members, technical and legal advice or other external support at these meetings. Timing of the meetings and dates should be discussed with community leaders during the scoping meetings. The decision making process will be for the community to decide and should be respected by other parties once the community has made it clear that they have a confirmed decision making process in place. There should also be adequate time allocated to allow for discussions.

The meeting should be planned to allow effective understanding and participation of the community members present. The meetings should be an opportunity to introduce:

- The concession holder and the concession agreement. This should, in most cases, be relatively straightforward as it would be expected that the participating communities are already party to a formal MOU or similar agreement with the concession holder;
- The outgrower scheme – as it is linked to concession agreement and models proposed;
- The benefits and challenges for the community in developing an outgrower scheme;
- Understanding different options - outgrower and independent models;
- What types of land can or cannot be used for an outgrower scheme (forests, unplantable, disputed);
- What are the main steps required to initiate an outgrower scheme (operational steps).

It is advisable to develop communication materials that are simple, pictorial and can be left with community members. An educational poster might be a good format, which can be placed in local stores and places of gathering.

The outcome of this stage would be to determine:
• Does the community need more time to consult more widely, including those not living in the community?
• Is the community keen to participate and be involved in the outgrower scheme?
• Is the community definition acceptable, do they want to have this changed?
• Do they want the meeting to be repeated (when and where)?

4.5.2 Stage 2 – Community Organisation
Determining the community organisation and decision making for the project will be the next progression.

At the town level, it is recommended that a “Community Producer Organisations” (CPO) be formed to act as the focal point for consultations and planning. The concept can be introduced to the community members but it is them that ultimately decides who would be its members. The committee of the CPO would typically include representatives of:

• Traditional leaders
• Adult men
• Adult women
• Youths

Note: under the proposed Land Rights Act, all customary lands will need to be registered and held by a Community Land Development and Management Association, and there are rules on its composition and governance. When the law is passed, there will need to be a process to transition to these new land owner associations, and from then on, the consultative process would be focussed around the land owner association.

The outcome of this stage would be to determine:

• The decision-making organisation;
• Management options for the outgrower scheme.

4.5.3 Stage 3 – Identifying Land Options
A participatory approach will need to be used for this next stage. This is important to help the CPO, and community, understand the spatial context of their land and this is an opportunity to understand what or how land is currently being utilised. Within this backdrop, the community is then asked to consider potential options for the outgrower scheme (i.e., land area to be proposed). There needs to be a clear guideline as to choice of land (and location) of the outgrower scheme.

Time should be allocated to survey the perimeter of the proposed land areas. This stage would also be useful to identify lands that are under community protection (sacre...
etc.) and types of crops/farms currently being cultivated (on the proposed farm and in general). Participatory maps, that are geocoded, would be an outcome of this process.

With the location identifiable on a map, all potential lots are assessed for likely presence of HCVs, high forest densities, land suitability (based on terrain, soil and hydrology). If required, a third party could be engaged but it is likely that the company may already have this information at hand. The results of this analysis (and land suitability) should be communicated back to the working group.

The outcome of this stage would be to determine:

- Spatial map of the town (based on “participatory” community maps);
- Map of the proposed areas (and any HCS, HCV areas indicated);
- Sketch map of the proposed development (plantable and unplantable areas).

There is a great deal of information and experience now developing in Liberia on the FPIC process described above, particularly within concession holders which are active participants in the RSPO. The FPIC processes described above should be at least as robust as those being used in agreeing land for oil palm use between communities and the concession holders.

### 4.5.4 Stage 4 – Defining the Development Boundary

Once the target area has been confirmed, the area will be pegged and surveyed by a professional surveyor. This would give an opportunity to identify any unplantable areas (ecological or cultural); for example to identify any areas that should be set aside for protecting wetlands, waterways or steep areas.

The idea for pegging the boundaries is to give the community (and adjacent) communities a chance to review the boundary. A public notice board should be erected that informs the public of the intended development. There may be disputes or issues arising from this stage. The working group should be the point for any issues or disputes, and if need be, the CPO or company could be consulted to find a solution. The process should only proceed if there are no disputes on the parcel of land.

The outcome of this stage should be to determine:

- Development area demarcated (with public notice);
- Revised map of the proposed development area.

### 4.5.5 Stage 5 – Development Plans, Public Notification & Approvals

With the area defined, the company is able to assess the area and develop a development plan. The plan would need to at least provide:
- Outgrower scheme management;
- Location map;
- Total area to be developed;
- Input requirements (people, materials and machinery);
- Proposed timeline;
- Labour or other requirements from the community;
- Schedule of development costs.

All legal documentation and plans will need to be communicated to the CPO in a form and manner that they would be able to understand. FPIC Guidelines dictate that independent legal advice should be recommended in every case but it is up to the community to decide whether to take this up.

A public notice should be prepared and circulated. The notice should provide a summary of the plans, development boundary and provide a contact person for the project (CPO representative). The public notice is to allow feedback from wider members of the community, the district and elites that may not be living in the community.

There may be feedback, disputes or issues arising from this stage. The CPO should be the consulted, and if need be, the company could be consulted to find a solution. The process should proceed after any disputes have been resolved in accordance with RSPO FPIC guidance on decision making, in a manner agreed by the community, in a way where the interests of the majority prevail and where the issues raised my those not in agreement have been properly received, discussed and decided upon.

The CPO approves the development plan. At this stage, the company is able to prepare the legal documentation required for the scheme. This may require an agreement between company and the CPO (or the Lands Association).
5 Field Development

5.1 Land Preparation

The plan assumes all 3,200ha of pilot outgrower palms are planted in 2017. GVL and SDPL have the capacity and seedlings to do this.

Land is cleared mechanically, using medium-sized bulldozers (CAT D6/D8). Land is generally flat to undulating so not unduly difficult or costly to prepare for planting except where terraces are required.

5.2 Planting Material

5.2.1 Choices

Two factors guide the choice of oil palm planting material:

a) the characteristics of the tenera palms that are on offer;
b) the reliability of the seed production.

5.2.2 Characteristics

The offerings (“varieties” or “reproductions”) from the major oil palm seed houses do not show great variation in oil yield potential under good growing conditions. Any that show above average annual increments in height are to be avoided for this reason unless they have an offsetting advantage. Where there is seasonal drought, as in Liberia, varieties that were selected under similar conditions may have an advantage. PalmElit SAS (www.palmelit.com) (the CIRAD organisation that commercialises their research developments) has excellent planting material developed from the former IRHO programme. Resistance to Fusarium oxysporum f.sp. elaeidis (“wilt”) is a consideration for West Africa where on occasion even first plantation developments have suffered economically-serious losses (Figure 3). PalmElit offers resistant material which does not incur a yield penalty.
5.2.3 Seed Production

There are two components of successful seed production: the choice of the individual palms that are used as seed bearers and to provide pollen, and the control over pollen contamination of manually pollinated female inflorescences and of the processing of the seed. PalmElit is highly satisfactory in these regards.

5.2.4 Recommendation

- Purchase germinated seeds of advanced wilt-resistant material from PalmElit’s seed production units in Pobé (Benin) or Indonesia.
- Investigate the value of investment in a low-lipase activity seed which is newly available from PalmElit. This progeny is claimed to increase OER by 0.4% while reducing free fatty acid build up by as much as 30%. The latter feature may be particularly beneficial in outgrower plantings where the time between harvesting FFB and arrival at the mill gate could be longer than that from a company’s own plantation.

5.3 Planting Seedlings

Seedlings are planted into the field in the wet season but allowing two months of wet weather after planting before the dry season commences, so the planting season in Liberia is from April to August inclusive. For modelling purposes the average month of June has been assumed for all planting. Hence at the end of the calendar year of planting the seedling is deemed to be six months old.

Seedlings will be produced in large scale nurseries by GVL and SDPL. If cost-effective it may be possible to establish satellite nurseries of about 100,000 seedling capacity at each planting site if water is abundant all year round for irrigation. This will minimise transport costs of seedlings and plant stress caused by the handling. The estimated transfer cost to the outgrower plantations is $4.20 per seedling, or $622/ha at a planting density of 148/ha.
5.4 Field Upkeep

5.4.1 General

GVL and SDPL will adopt plantation best practice to the community pilot plantations through their own Standard Operating Procedures (SOPs). This will be backed up by continual training at all levels in techniques of crop husbandry and management practices.

5.4.2 Weeding

Leguminous cover crop will be planted prior to planting of palm seedlings as a means to shade out competing perennial grasses and to provide additional nitrogen to the soil. Woody weeds will be removed by hand and/or poisoned. The objective will be to develop mixed soft vegetation between the palms as they mature. The principal weeding activity in the mature palm fields will be spraying of paths and palm circles for ease of access for harvesting and loose fruit collection (Figure 4).

Figure 4 Established cover crop between young palms & Chemical weed control in mature palms

5.5 Harvesting and Yields

The yield profile in West Africa is later and has a lower peak than in SE Asia. The peak yield assumed in the financial projections (Table 3) is higher than the generally-achieved levels in West Africa at 19 t/ha but justified in terms of location (more even rainfall pattern than much of West Africa) and plantation management (expected to be better than average). There might also be some benefit from more recent generation of seed although not certain.
### Table 3 Assumed Yield Profile

<table>
<thead>
<tr>
<th>Year</th>
<th>Age (months)</th>
<th>FFB t/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting year (PY)</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>PY+1</td>
<td>7-18</td>
<td>0</td>
</tr>
<tr>
<td>PY+2</td>
<td>19-30</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>31-42</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>43-54</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>55-66</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>67-78</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>79-90</td>
<td>17</td>
</tr>
<tr>
<td>8 to 20</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Harvesting productivity in Liberia is likely to be similar to SE Asia or other African oil palm regions with similar costs.

### 5.6 FFB transportation

FFB transport operates most efficiently and therefore cost-effectively when the distance from field to mill is short and when FFB pick-up points are close together so as to minimise the total turnaround time of trucks (Figure 5).

**Figure 5 GVL Cluster Efficiency**

![GVL Cluster Efficiency Diagram]

*Source: GVL Presentation 18 April 2016*
The purchase point for FFB will be the mill gate. Therefore the transportation of FFB from field to mill is a cost to the outgrower. Initially, FFB transport logistics will probably be organised by GVL and SDPL at a market rate but over time there is scope for local transport contractors to be established to take over FFB transportation from the companies. Indeed, as the tonnages will be known and confirmed under a contract then the business of FFB transportation could be an attractive investment for a DFI as a significant amount will be needed to purchase trucks.

Transport distances from field to mill in the Sinoe pilot areas are:

- From Tartweh to the East Sinoe mill site, approximately 15km;
- From Numpoph to the East Sinoe mill site, approximately 20km;

- mill construction expected within the next 5-7 years and in line with the rate of planted area expansion in East Sinoe.

Transport distances from field to mill in the Grand Kru pilot areas are:

- From Sorroken to mill site A approximately 33km;
- From Sorroken to mill site B, approximately 45km;
- mill construction expected between 2017 and 2019.

In PAC and Zodua areas the distances are assumed to be 20km each.

The financial model assumes an average FFB transport cost of US$17/tonne, being an average weighted using hectarages as a surrogate for yield (Table 4).

**Table 4 Transport distances and costs**

<table>
<thead>
<tr>
<th>Location</th>
<th>Area (ha)</th>
<th>km from mill</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC</td>
<td>600</td>
<td>20</td>
</tr>
<tr>
<td>Zodua</td>
<td>900</td>
<td>20</td>
</tr>
<tr>
<td>Sorroken</td>
<td>500</td>
<td>33</td>
</tr>
<tr>
<td>Tartweh</td>
<td>700</td>
<td>15</td>
</tr>
<tr>
<td>Numopoh</td>
<td>500</td>
<td>20</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weighted Average</strong></td>
<td>20km</td>
</tr>
<tr>
<td><strong>Transport cost $/tonne</strong></td>
<td>$15.00</td>
</tr>
<tr>
<td><strong>Bunch loading cost</strong></td>
<td>$1.25</td>
</tr>
<tr>
<td><strong>Loose fruit loading cost</strong></td>
<td>$0.75</td>
</tr>
<tr>
<td><strong>Average cost from field to mill</strong></td>
<td>$17.00</td>
</tr>
</tbody>
</table>
6 Scheme Management

6.1 Purpose

The proposed structure is shown in Annex B. LOPM is needed to carry out the many administrative and project management and governance responsibilities during the pilot phase (Figure 6). As well as taking responsibility for managing the scheme it will also be the vehicle through which investment is channelled between investor and application as contract payments for field development by the companies, training, technical assistance and infrastructure contracts to service providers and management of the recovery of loan repayments through FFB sales.

The roles and responsibilities of the LOPM are to:

- Confirm undisputed ownership of community land used for oil palm development that is satisfactory to investors;
- Facilitate the establishment of Community Producer Organisations (CPOs), and maintain oversight of the CPOs once formed;
- Facilitate the grouping of the CPOs;
- Assist with raising finance from DFIs and management of loan disbursements;
- Receive finance and manage all project cash inflows and payments;
- Facilitate training of communities in the oil palm business overall;
- Regulate the industry including ensuring compliance with environmental and social agreements;
- Approve the FFB price formula to ensure that fruit purchased by mills from independent smallholders is fairly priced;
- Agree input supply transfer prices with companies such that they are fairly priced to farmers;
- Manage RSPO compliance.
6.1.1 Financial Management

LOPM would be the investee entity which would call down funds from investing institutions and on-lend to pilot scheme communities through a secure, title-backed loan agreement. This is thought simpler and less costly than channelling funds via a line of credit through local Liberian banks. The five loan books would be managed actively, an advantage being the close link between financial and operational management of the scheme.

A major LOPM activity will be to monitor field development progress against invoicing from the companies to LOPM. The LOPM will have staff in the field working closely with the companies and communities to ensure progress is measured and reported promptly.

There may be a need to enshrine, perhaps through legislation, accounting transparency in the LOPM and/or guarantees about how it may disburse funds.

6.1.2 Scheme Governance

Governance mechanisms are needed to ensure transparent and accountable decision making and to mitigate tensions that may emerge between companies and outgrowers, related to

1) the sourcing and application of finance;
2) FFB price setting;
3) grievances settlements;
4) new land claims that may arise, particularly following enactment of the Land Act.

6.1.3 Training and Technical Assistance

Formal training may or may not be provided by the companies. On-the-job training is part of standard plantation management practice and so is to be expected for the first eight years at least, but there will also be a need for formal training programmes in plantation management and business management in preparation for the point when communities or individual farmers take over the running of the plantings. Hence contracts need to be offered and given to specialist organisations to carry out this work.

6.1.4 Progress Monitoring

As well as monitoring progress for the purposes of invoicing and loan calls and repayments, there will be a requirement for regular reporting to Government and stakeholders, especially as this pilot scheme will be pioneering in many ways, so progress will have a large following.

6.1.5 Liaison Office

Sponsorship of the pilot project is GoL. There will be a need to liaise between communities, companies, investors and GoL as well as peripheral stakeholders such as NGOs, CSOs and the local population, contractors and other ancillary businesses.

6.1.6 FFB Price Negotiations

A key factor in the viability of the scheme is the price paid to outgrowers so it will be vital for companies and communities to feel that the FFB price is fair and its calculation transparent. This calls for close liaison between companies and communities but communities are unlikely to be able to understand fully the methodology, so it is on their behalf that LOPM will agree the formula and entries to calculate a monthly price.

6.2 Organisation

An organisational structure consisting of General Manager, Accountant, Outgrower Manager and one Field Assistant for each of the two regions does not require a large budget. The best solution is probably to offer a full staffing and management contract to a development consultancy or project management organisation specialising in this type of contract.
6.3 Financing

The pilots themselves do not generate enough cash to be able to cover the running costs of LOPM. If the pilots are successful and a much larger area of outgrower palms is planted then a levy on FFB sales would be the right means to finance LOPM but until then the running costs will have to be financed by way of grant.

It is estimated that a grant of $3 million be applied to management costs of LOPM for the five year period 2017 to 2021. Thereafter, LOPM may be self-financing from a cess or lien on CPO sales or FFB purchases. This is subject to production performance to confirm the exact finance requirement.

Table 4 Indicative LOPM Budget – Five Years (2017 to 2021). US dollars

<table>
<thead>
<tr>
<th>Description</th>
<th>No</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<td>200,000</td>
<td>200,000</td>
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<tr>
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<td>150,000</td>
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<td>Consultancy support</td>
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<td>Total</td>
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<td>570,000</td>
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</tr>
</tbody>
</table>
7 Infrastructure

7.1 Improvement Project

The costs of developing and maintaining roads within the pilot project oil palm plantings will be borne under normal plantation establishment and maintenance expenditure. The maintenance and upgrading of public feeder roads that connect the pilot projects to the mills or regional buying stations will need to be borne by external agencies. For this reason a project is needed to identify the roads that need upgrading or construction and to identify potential organizations to fund this work.

7.2 Infrastructure Financing

Finance is required to:

a) carry out the roads survey that will determine the required works and a costed and scheduled plan (some of this activity has already been completed by GVL) and;

b) the actual cost of the project itself.

Financing of the road upgrade work should be the responsibility of the Government, so the cost of the roads upgrade project would probably be donor-funded.

While road upgrading and maintenance is an essential part of project financing, it will not necessarily be needed in the first few years before the first FFB is hauled from field to mill, so fundraising for this component is not an urgent priority.
8 Technical Assistance

8.1 Out grower Needs

The highest priority needs of the outgrowers can be summarized to be the following:

- Access to markets for oil palm fresh fruit bunches (need for road development and transport to enable farmers to access mills or buying centres from their plantations);
- Training (agronomic, financial literacy, recordkeeping, conservation, health and safety);
- Access to inputs (fertilizer to enhance yields and improved variety seeds (Tenera) for new planting and replanting);
- Financing for inputs, transport, labour (especially for replanting).

It is important that donor funding is used to fund activities that the pilot oil palm investors would not otherwise undertake. As such, the grant-funded projects in support of the Liberian outgrowers include only activities that they do not have the capacity to undertake.

8.2 Training

There is a severe technical and management skills deficiency within the pilot communities and training will be an essential component of the support programme to outgrowers. However, by contracting GVL and SDPL to develop and manage the pilot areas then it is not essential that this training programme commences immediately but more related to supplementary to on-the-job training of field workers employed from the communities. From, say, five years the training focus will need to be stepped up prior to the communities managing their own affairs.

8.3 Transport Services

GVL and SDPL will provide transport for FFB from the field or buying centres to the mill and will deduct the cost of this from the price paid to farmers/communities. The communities do not have the resources to facilitate transport but one spin-off of the pilot projects might be that communities themselves direct some cash surplus earned from oil palm into establishing transport contracting services (e.g. tractors, trucks) for use in hauling fruit to buying centres or mills.
9 Social and Environmental Impact

9.1 Community Expectations

In the community meetings, it is clear that communities see the outgrower scheme as their opportunity for development. It is the way to progress – to see their villages being connected through roads and bridges, to see money for schools and medical facilities. The community farm is therefore a way to make this happen.

For community members, the outgrower scheme, is not isolated from the Company-community MOU or agreements. It is part of a suite of benefits for the use for their lands. This is important to keep in mind as the Company’s own commitments towards this social agreement will have a direct or indirect impact on the success of the outgrower scheme; including the choices the communities make in which model or options are preferred. For example, if the scheme is dependent on the Company as the management agent for the community farm, the community will be very uneasy with this option if there is no trust in the Company (due to failed promises or other reasons).

The other consideration for the outgrower scheme is to be aware of existing decision-making bodies or other requirements under the MOU. In the process of establishing the outgrower scheme, preference would be to build on these existing institutions, rather than creating new ones. For example, there may be community-community representative committees established to negotiate with the Company or there is an established “community development fund” (perhaps, this is a natural fund to direct any profits from the outgrower scheme).

9.2 Development Progress

With financing, consent and development plans in place, the development is now able to proceed. The Company will provide the management supervision required to execute the project. This would involve on-the-job training for workers (and the community).

The operational management of the scheme will need to conform to legal and relevant standards. In principle, all work will be designed to have a low environmental impact, in a safe work environment and reduce risk of public safety. This would be a continual learning process based on an adaptive management framework.

Once the project is operational, the CPO would meet at least quarterly with the plantation management to be updated on progress and to resolve any disputes or issues arising.

Every five years, the scheme should be reviewed and where possible, adjustments are made or procedures are improved.
Consideration should be made of the cost of replanting outgrower palms after 20-25 years and the need to prepare for the financing of the replanting. One option from SE Asian experience is for communities to voluntarily contribute a percentage of revenues into a replanting fund that is calculated to build enough cash to finance the replanting operation when due. This removes the uncertainty of a repeat fundraising at that time.

9.3 Environmental Issues

An important environmental benefit of the outgrower scheme is that of proper treatment of mill effluent in a large, modern mill compared with poor or nil treatment in small village mills and the resulting pollution of watercourses. Furthermore, the better Oil Extraction Rate (OER) of the large mills means that a smaller area of palms is needed to produce the same quantity of palm oil and so more land left unplanted and available for other farming activities.
10 Financial Benefits

10.1 Community Model

All five communities involved with the pilot project have requested the same development path for their respective community oil palm plantations, contracting all the operational and financial management of plantation development to SDPL or GVL until the funding used for the plantation development has been repaid.

10.2 Income Generation

A community plantation of 500 hectares has the capacity to generate substantial cash income to its members once the development loans have been repaid. At peak production, the value of FFB sold can exceed $1 million with half of the value retained within the community, either as net plantation profit or wages earned by community members through employment on the plantation.

Table 5 Community and Farmer Income Statements

<table>
<thead>
<tr>
<th>Community Plantation Profit and Loss Account (Post Loan, 500ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Sales of FFB</td>
</tr>
<tr>
<td>Field Maintenance</td>
</tr>
<tr>
<td>Labour Cost</td>
</tr>
<tr>
<td>Materials/tools/transport</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
</tr>
<tr>
<td>Labour Cost</td>
</tr>
<tr>
<td>Materials/tools/transport</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Net Profit</td>
</tr>
<tr>
<td>add back plantation wages to community employees</td>
</tr>
<tr>
<td>Total income to community</td>
</tr>
</tbody>
</table>
11 Fundraising

11.1 Project Cost and Funding Requirement

The total project cost is estimated at US$22.8 million. Of this amount, US$16.7 million is required for the physical development of the plantations including overhead and management costs, US$3.0 million for the operating costs of LOPM and the remainder is accounted for by the early repayments of the development loan.

<table>
<thead>
<tr>
<th>Year</th>
<th>US$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantation Development Costs</td>
<td>16.7</td>
</tr>
<tr>
<td>LOPM Operating costs (5 years)</td>
<td>3.0</td>
</tr>
<tr>
<td>Finance costs</td>
<td>3.1</td>
</tr>
<tr>
<td>Project Cost</td>
<td>22.8</td>
</tr>
<tr>
<td>Development Loan</td>
<td>19.8</td>
</tr>
<tr>
<td>Support Grant for LOPM</td>
<td>3.0</td>
</tr>
<tr>
<td>Total funding</td>
<td>22.8</td>
</tr>
</tbody>
</table>

11.2 Standard Pilot Scheme Funding

The financial model assumes zero interest loans for the community pilots because the loan term is long and pioneering nature of the project and uncertain yields and prices means that there is a risk of projected cash flows being either much higher or lower than forecast, the latter posing a risk of cash flows being insufficient to service loans or extending the term to an unacceptably long period.

11.3 Production Protection Agreements

In 2016, IDH through Norway's International Climate and Forest Initiative (NICFI) mobilized resources to de-risk part of an investment in palm oil outgrowers, ultimately to make it possible for financial institutions to invest in these outgrower schemes. This de-risking facility is part of the IDH ‘Smallholder Productivity and Forest Conservation Program’, managed by IDH, which was launched in March 2016. The project proposes two pilot areas in the region of 2,000-4,000 ha, with the ambitious target to begin the outgrower scheme in November 2016.
As a condition of IDH/NICFI’s participation, the de-risking facility seeks to introduce PPAs, tripartite agreements signed by the GoL, the community and the palm oil concession holding company, in which parties agree to conserve and actively protect a certain area of natural forest in exchange for a similar area of oil palm invested in. IDH has engaged with the Global Environment Facility (GEF), Netherlands Development Finance Company (FMO), International Finance Cooperation (IFC) and the World Bank (WB) and have the potential for a significant investment. However, as far as is known a Memorandum of Understanding (MoU) has been signed between IDH and Forestry Development Authority (FDA) but no other stakeholders to date.
12 Project Programme

The following schedule in Table 6 for the pilots in forested areas documents was developed by participants at the IDH workshop held on 18th and 19th April 2016. It has been updated and amended/extended and assumes a target first planting in April 2017.

Table 7 Estimated Programme Schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>Sub-component</th>
<th>Period</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structures/Projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOPM set up</td>
<td>1) Legal status and structure confirmed for management and also agreement with potential financiers on appropriate financial structure for loan governance and management</td>
<td>Jun-Sep</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td></td>
<td>2) Governors/trustees/board agreed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Incorporate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Producer Organisations</td>
<td>1) Legal status and structure confirmed</td>
<td>Jul-Oct</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td></td>
<td>2) Community governors/board agreed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Incorporate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure Upgrade Project</td>
<td>1) Contract for survey and budget</td>
<td>2018</td>
<td>LOPM/GROW/NBC</td>
</tr>
<tr>
<td>Training/TA Project</td>
<td>1) Contract for project definition and budget</td>
<td>2018</td>
<td>LOPM/GROW/NBC</td>
</tr>
<tr>
<td>Component</td>
<td>Sub-component</td>
<td>Period</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>B. Community Oil Palm</td>
<td>1) Determine go/no go areas (quick land cover reference), identify communities</td>
<td>Apr-May</td>
<td>Concessionaires as implementation agent</td>
</tr>
<tr>
<td></td>
<td>2) ‘Small committee’ to work with communities on proposition (community legal entity, community benefit sharing mechanism for PPA, PPA penalties)</td>
<td>Jun-Sep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Discuss proposition with communities</td>
<td>Jul-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Engaging communities (FPIC), in parallel with mapping, etc.</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) Develop agreed development map</td>
<td>Apr-Aug</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6) Applications to Lands Commission for legal title. Agreement sought on fast-tracking</td>
<td>Jun-Sep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7) Carry out SEIA</td>
<td>Apr-Aug</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8) Carry out HCV/HCS assessment</td>
<td>Apr-Aug</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9) Use above to develop new planting procedure</td>
<td>Sep-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10) Development land (and Protection Plan where relevant) and budget with community</td>
<td>Aug</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Sub-component</td>
<td>Period</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>C. PPAs</strong></td>
<td>1) Identify communities and map forest use</td>
<td>Jun-Nov</td>
<td>FDA, NGO and Communities</td>
</tr>
<tr>
<td></td>
<td>2) Scope for alternative livelihood projects that can be offered</td>
<td>Jun-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Discuss proposition with communities</td>
<td>Aug-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Forest baseline</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) Bring lessons learned from other landscapes</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6) Determine Roles and Responsibilities in PPA</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7) Determine funding structure and budget</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8) Identify and prepare partners for alternative livelihoods</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9) Protection plan with community</td>
<td>Apr-Nov</td>
<td></td>
</tr>
<tr>
<td><strong>D. Protection Plan and Governance of the PPAs (for outgrowers and non-outgrowers communities)</strong></td>
<td>1) Criteria on forests to be conserved under PPA pilots</td>
<td>Apr-Jul</td>
<td>FDA, conservation NGOs</td>
</tr>
<tr>
<td></td>
<td>2) Map potential legal status forest and community management arrangement</td>
<td>Apr-Nov</td>
<td>FDA, conservation NGOs</td>
</tr>
<tr>
<td></td>
<td>3) Legal entity / entities established in communities (for outgrowers and for community benefit sharing)</td>
<td>Apr-Nov</td>
<td>FDA, MoA and community</td>
</tr>
<tr>
<td></td>
<td>4) Develop legal framework for PPAs</td>
<td>Apr-Aug</td>
<td>FDA and EPA</td>
</tr>
<tr>
<td></td>
<td>5) Protection plan, including roles and responsibilities in PPA (outgrower and non outgrower communities)</td>
<td>Sep-Nov</td>
<td>FDA, MOA, concessions, communities, IDH</td>
</tr>
<tr>
<td>Component</td>
<td>Sub-component</td>
<td>Period</td>
<td>Principal</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>D. Investment</strong></td>
<td>1) Operational Model</td>
<td>Apr-Jun</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td></td>
<td>2) Financial plan for CoP</td>
<td>Apr-Jun</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td></td>
<td>3) Sales Agreement Community-Concession</td>
<td>Jun-Aug</td>
<td>Concession, community, Min Finance, IDH</td>
</tr>
<tr>
<td></td>
<td>4) Determine conditions for loan to Community/LOPM</td>
<td>Apr-Aug</td>
<td>Concession, community, Min Finance, IDH</td>
</tr>
<tr>
<td></td>
<td>5) Define investment criteria</td>
<td>Apr-Aug</td>
<td>IDH, Min Finance, FDIs</td>
</tr>
<tr>
<td></td>
<td>6) Approach financiers for pilot and LOPM finance</td>
<td>Aug</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7) Approach donor agencies for grant finance for infrastructure upgrade project</td>
<td>2018</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td></td>
<td>8) Approach donor agencies for grant finance for training/TA project</td>
<td>2018</td>
<td>GROW/NBC</td>
</tr>
<tr>
<td><strong>E. Monitoring</strong></td>
<td>1) Design Monitoring &amp; Evaluation system</td>
<td>Apr-Aug</td>
<td>FDA with INGO</td>
</tr>
<tr>
<td></td>
<td>2) Design penalties system in investment schedule tied to monitoring forests</td>
<td>Aug-Nov</td>
<td>FDA, IDH, legal advisor</td>
</tr>
<tr>
<td><strong>F. Communication</strong></td>
<td>1) Transparent and based on dialogue from start to end, FPIC</td>
<td>Throughout</td>
<td>NBC, FDA, MoA, EPA, MIA, Implementation partners, IDH</td>
</tr>
<tr>
<td></td>
<td>2) Convene regular meetings, agree on and align messages</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Share learnings, align approach</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex A- FPIC SOP Process
STAGE 1
Identification of community and decision making bodies for the target area

Consult @ District or County level

Consult @ Town-level

General Introduction Meeting

Meeting members agree to proceed, requests for further meetings or decides not to participate

Y/N

Abort & Inform

General Assembly

Meeting members agree to proceed, requests for further meetings or decides not to participate

Y/N

Abort & Inform

To Stage 2
STAGE 2

Agreement on the decision-making body

Identify representative organisation for decisions on customary lands

General Assembly

Y/N

Meeting members agree on appropriate representative committee for decision-making

To Stage 3

Seek other options and return back to GA
STAGE 3
Consult with Community Representatives
Field Teams Logistics & Training

Village Mapping and Meetings
Potential Area for Outgrower Scheme Mapping
Focus-group Participatory Research

Analysis of the data
Summary of Results

General Assembly

Y/N

To Stage 4

Participatory research with community members - develop Town-plans and review options for land parcels

Participatory planning period with communities involved

Meeting to present the results of the research and town-plans. If project is feasible, move to next Stage
STAGE 4: Defining the project boundary and allow for period of public notification

1. Gather information on the Project Site
2. Erect a Public Board
3. Demarcate the Boundary with markers or pegs
4. Survey and exclude areas unsuitable
5. Consult with Community if any disputes have arisen

Review of refine (as required)

Final meeting to agree on development boundary, areas involved and address any concerns.

General Assembly

Y/N

To Stage 5
STAGE 5: Development plans, securing financing and public notification

Prepare Development Plan

- Development Maps
- Development Budget
- Development Plan (including ESIA considerations)
- Legal Documentation

Secure Financing

Prepare documentation and legal agreements for Financing (dependent on target source)

General Assembly

Communities are engaged to ensure Development Plans and Legal Agreements are clearly understood

Public Disclosure

Summary of Development Plans is published (according to rules of the RSPO on New Plantings), 30-day public notification period.

Y/N

If no issues to be resolved, then can proceed to Development. Otherwise, communities are consulted or development plans modified.

To Stage 6
STAGE 6

Development is initiated

Development Plan is approved

Project Management Team established

Feedback or request for Correct Actions (to Project owners)

Development Begins

Third-party Compliance Reviews

Project-Community Progress Meetings
Annex B - Outgrower Scheme Structure

Investors and Donor Agencies

Liberian Oil Palm Management

LOPM-managed Fund

(Specialist finance/admin/Coop NGO/contractor)

(Revolving Fund)

(Specialist finance/admin/Coop NGO/contractor)

(Grants and/or zero interest loans)

PAC Community Producer Organisation

Zodua Community Producer Organisation

Numopoh Community Producer Organisation

Tartweh Community Producer Organisation

Sorroken Community Producer Organisation

PAC Community Development Fund

Zodua Community Development Fund

Numopoh Community Development Fund

Tartweh Community Development Fund

Sorroken Community Development Fund

Investment

Repayment

Profit

GROW Liberia – Community Oil Palm Outgrower Scheme: Operational Model