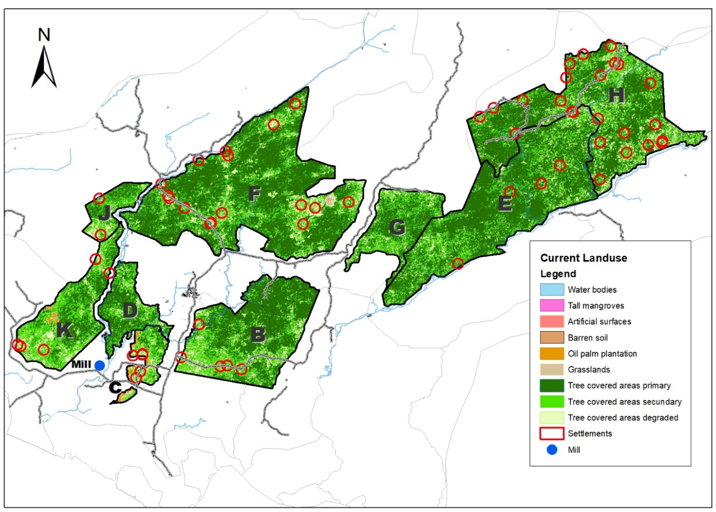
Targeted Scenario Analysis (TSA): Sustainable Palm Oil Concessions in Liberia

Economic Policy Brief

The Government of Liberia has prioritized the development of agroforestry concessions, and interest from global companies confirms palm oil as a significant economic opportunity for the country; they have already invested on the order of US$500 million since 2008. Communities and smallholder producers in and around allocated concessions are eager for concessions to proceed, as employers and purchasers as well as funding sources for socioeconomic benefits such as improved roads and schools. Nevertheless, development of the oil palm sector has stalled.

This study compares economic gains and losses from different possible oil palm development paths in Liberia using Targeted Scenario Analysis (TSA). The study focusses on the Manco Palm Oil Industries (MPOI) concession formerly held by Sime Darby. In terms of overall economic value generated as well as environmental impacts, our analysis shows that concession development that prioritizes smallholders and environmental sustainability is in the best interest of the concessionaire as well as the Liberian economy.

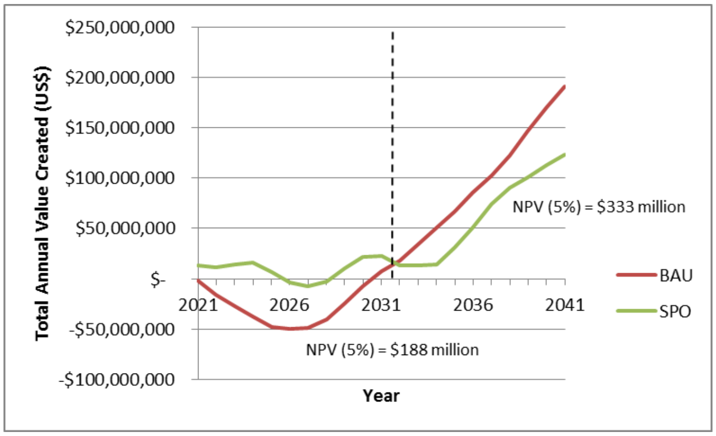


Current Land Cover in the MPOI Oil Palm Concession

The UNDP developed the TSA methodology to help decision makers incorporate the value of ecosystem services into public policy.[1] The analysis compares conventional plantation development (the business as usual, or BAU, scenario) to smallholder-centered development that complies with Roundtable on Sustainable Palm Oil (RSPO) standards (the Sustainable Palm Oil, or SPO scenario). The findings highlight that:

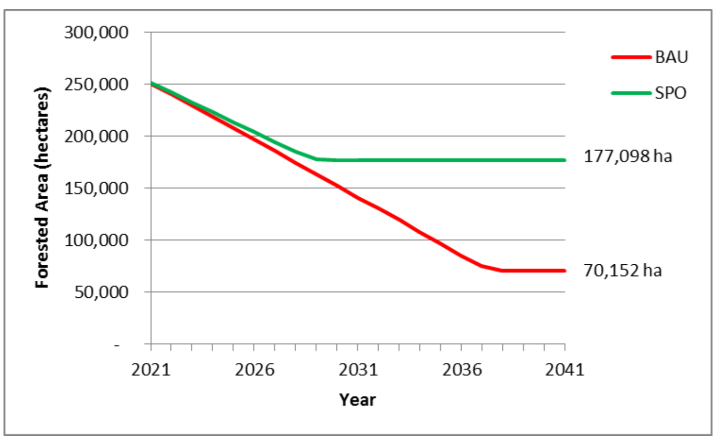
[1] Alpízar, F. & A. Bovarnick. 2013. *Targeted Scenario Analysis: A new approach to capturing and presenting ecosystem service values for decision making*. United Nations Development Programme (UNDP).

1. Including sustainable palm oil in the Government of Liberia's Pro-poor Agenda for Prosperity and Development, with an emphasis on smallholder producers and RSPO standards, is sound economic policy. The SPO scenario offers substantially greater total value than the BAU scenario (US$333 million over 20 years, versus US$188 million).[2]



Total Annual Value Created under SPO and BAU Scenarios

2. Environmental indicators also show the superiority of SPO over BAU; the SPO scenario maintains 107,000 hectares more under forest than the BAU scenario, and avoids the loss of at least US$75 million through carbon emissions from forest conversion.



Forested Area within the Gross Concession Area under SPO and BAU Scenarios

Differences in results for the two scenarios are driven by two main factors. First, the SPO scenario includes the provision of affordable credit for smallholder oil palm development. Second, the SPO scenario maintains all primary forest and at least 60% of secondary forest, to reflect compliance with

[2] Results are reported as Net Present Values (NPV). NPV takes the total of the annual values over the 20-year model period, applying a discount rate to capture the fact that a given amount in the future is worth less than that same amount is worth today.

RSPO standards. These factors correspond to current commitments of the Government of Liberia, as reflected in concession agreements and national development policy.

Conclusions and Recommendations

The conclusions of the TSA for oil palm development may be summarized as follows:

1. The analysis reinforces the position of sustainable palm oil, with an emphasis on smallholder producers, in the Government of Liberia's Pro-poor Agenda for Prosperity and Development. Ignoring lost carbon values, the SPO scenario offers substantially greater total value than the BAU scenario (NPV of US$378 million, versus US$301 million).
2. This is achieved principally through concessionary credit to the smallholder sector.
3. Including carbon loss in the model further strengthens SPO results relative to BAU (NPV of US$333 million versus US$188 million); the SPO scenario avoids the loss of at least US$75 million (NPV) through carbon emissions from forest conversion, maintaining 107,000 hectares more forest than under the BAU scenario.
4. Including other ecosystem service values under SPO would further reinforce this result.
5. These results hold and indeed become more pronounced with discount rates higher than the conservative 5% assumption used in the analysis.
6. Greater value and greater ecosystem integrity under SPO are accompanied by lower direct and indirect employment in the oil palm sector (42,803 jobs under BAU compared to 27,891 under SPO by year 2041).

Recommendations that follow from the conclusions above are:

- To maximize total value generated by oil palm development, the Government of Liberia should maintain its commitment to requiring that concessionaires abide by RSPO principles and criteria. At present, this commitment is reflected mainly in the concession agreements; issuing an explicit policy through the Ministry of Agriculture would lend this commitment additional force. The IMCC could reinforce this policy by facilitating a supporting Executive Order from the Office of the President, further strengthening the Government's position with respect to concessionaires as well as potential sources of financing for sustainable oil palm development.

- The national interpretation process for RSPO principles and criteria needs to be concluded as soon as possible, and must specifically address secondary forest in a way that is appropriate for a high forest, low deforestation, least developed country context. As an example, the model results show outcomes of a requirement that 60% of secondary forest be maintained, after protecting all primary forest as well as High Carbon Stock forest and High Conservation Value forest. Once the national interpretation has been validated and approved, including reconciliation with Liberia's National Forest Definition framework, it should be explicitly incorporated in the Ministry of Agriculture policy decree recommended in the previous point, and ideally reinforced by Executive Order. Subsequently, the Ministry, working with the NBC, LLA and FDA should require that oil palm development plans of both concessionaires and smallholder communities explicitly demonstrate how the national interpretation will be applied. Agency review of these plans would benefit from a land suitability map, which the GOL should require as part of the concession review package while national land-use suitability mapping efforts progress.

- The Government of Liberia, NGO partners, concessionaires and communities should redouble their efforts to develop a workable and sustainable model for smallholder oil palm development, with an emphasis on securing affordable credit to finance start-up costs. The advantages of the SPO scenario versus the BAU hinge on this commitment. Joint work by IDH and CI on a smallholder investment and production model with Sime Darby represents a well-advanced effort to design a mutually beneficial arrangement for communities and the concessionaire. The Government, MPOI, IDH and CI should build on this effort by using the sustainable model developed for this TSA to formulate a concrete investment prospectus for presentation to potential investors, particularly in the impact investment sector; this effort should be aligned with ongoing efforts by the World Bank, IFAD and USAID to address the absence of credit options for smallholders in Liberia. The model can also inform how conventional development funding sources (e.g. ODA, philanthropy) may direct support to enabling conditions such as building capacity to facilitate participatory land use planning within County Administrations.

- Given the enormous benefits that accrue to the concessionaire under the SPO scenario relative to BAU, it is in the interest of MPOI to provide further support for smallholder development. In addition to working with the Government and the civil society to identify potential financing sources such as impact investors, MPOI should examine how it can provide technical, financial and credit management extension services to support smallholder palm oil producers. In addition, MPOI should work with the smallholder sector to identify cost-effective arrangements for sourcing inputs.

- The Government of Liberia and NGO partners should redouble their efforts to advance REDD+ frameworks, and consider particular attention to including compensation for avoided emissions from deforestation through sustainable plantation development. To date, the evolving national REDD+ framework leaves unclear whether avoided deforestation and forest degradation within agroforestry concessions can generate revenue from carbon credits. The Ministry of Agriculture and the FDA should convene a joint session of the national REDD+ Technical Working Group and the National Oil Palm Platform of Liberia to explore how the SPO scenario can be positioned to generate carbon revenue. One use of eventual carbon revenue that should be considered is the creation of conservation-based jobs to help ensure avoided emissions from deforestation and forest degradation, and to offset the lower amount of employment generated under SPO compared to the BAU scenario.