Title: Integrating natural capital into agricultural business planning in sub-Saharan Africa
Embedding key metrics within project design and financial models

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1. Short Summary:
The Natural Capital Protocol can inform project design and financial modelling for large-scale agricultural projects. This article sets out an approach to using natural capital to enhance decision-making for investments involving multiple partners coming from different parts of the value chain. It draws on our experience working in cocoa, cassava, and tree nut value chains in sub-Saharan Africa.

Key Messages:
- Integrating natural capital into the modelling of the business plan from the outset ensures it is a core component of any project. This enables the choice of crops, farming systems, technology, financing structure to be optimised for natural capital from project design stage.
- Adequately valuing natural capital in a project that brings together companies across different parts of an agricultural value chain requires a common language for each partner to use.
- Including natural capital throughout the project process improves decision-making, reduces risks and enhances the engagement with community and local stakeholders.

2. Integrating the Natural Capital Protocol into agricultural project development
ImpactAgri creates and improves agricultural value-chains from input provider to retailer, accelerates large-scale performance improvement efforts and delivers agribusiness infrastructure projects. We project manage complex initiatives involving multiple parties along the value chain.

An important consideration for ImpactAgri is to consider natural capital within the process of new project development. This can increase profitability, ensure a more resilient and sustainable supply of each commodity, and improve the environmental and social sustainability of the project.

From our experience of a number of integrated food or agriculture value chain projects (e.g. coffee, cocoa, and tree nuts), there are a number of ways in which the Natural Capital Protocol can inform the typical project development process including financial modelling activities. Figure 1 below sets out the steps in a typical agri-project planning process, and illustrates how natural capital can be incorporated in the project financials and the planning process.
3. Embedding natural capital considerations into the financial modelling of a project

The project development process described above is informed by the evolving project financial model. Financial modelling approaches for agricultural projects tend not to account explicitly for ecosystem services. Instead most agricultural projects rely on impact assessments and a checklist-approach (e.g. certification, sustainable agriculture codes) to limit the impact of a project on the natural ecosystem.

In our view, these approaches are not sufficient: natural capital considerations are not embedded into decision-making and key trade-offs are not considered. ImpactAgri specifically embeds natural capital value into a project’s financial model by reviewing potential linkages to each key model assumption. By considering which specific assumptions need to be adjusted based on changing natural resources decision-makers at the corporate level can integrate natural capital into their investment decisions.

Figure 2 sets out common components of the financial plans of agricultural projects, and provides examples of how natural capital can be embedded.
4. Conclusions

The quantity and sophistication of natural capital reporting at the corporate level has been on the increase. However, few companies are reporting sufficient information to enable investors to assess all of the natural capital risks and opportunities facing specific projects and associated value chains.

The approach discussed here enables corporate agri-businesses to move away from piecemeal, issue-based or checklist-based reporting to an integrated analysis of natural capital risk and opportunity. In particular, it includes:

- Reviewing financial models of buyers (aggregation of different farmers) to identify key assumptions that can be impacted by natural capital
- Explicitly bringing in natural capital data and analyses to back up the assumptions
- Understanding risks and opportunities for key components of business plan, measuring trade-offs of various farming methods, and conducting sensitivity analyses (e.g. managing soil organic matter to reduce irrigation requirements, etc.)
- Analysing portfolios to identify where exposure might be to pests and diseases, water shortages, lack of pollination services, etc.

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