

Natural Ecosystem Accounting for Forico

Forico is undertaking world-leading research to develop integrated environmental-economic accounts that reveal the underlying value of its natural capital. These accounts will provide the first true benchmark of sustainability, from an economic, environmental and social perspective. Extended accounting for ecosystems and ecosystem services is at the leading edge of decision support tools, and Forico are proud to be charting a new way forward in partnership with IDEEA Group.

The Challenge

Forico manages 181,000 hectares of plantation and native forest land in Tasmania and is committed to “making every hectare count”. 100,000 hectares of plantation is managed for productive purposes, whilst the 81,000 hectares of native forest is managed for conservation and biodiversity values. Forico recognise the full range of costs and benefits associated with sustainable forest management. This aligns with Forico’s commitment to comply with internationally recognised third party Sustainable Forest Management Certification Standards.

Forico’s corporate obligations require it to demonstrate the economic value inherent in maintaining environmental and social sustainability. This has always been difficult because traditional metrics of economic performance are based on criteria that exclude information such as ecosystem health and biodiversity. Furthermore, many other values that community members consider important for “making every hectare count” are not captured in traditional accounting frameworks.

This lack of integration of environmental and social factors in economic accounts is of particular relevance to Forico because 45% of its forest holdings are native forest areas which are being managed for their conservation and biodiversity values. Maintenance and enhancement of these native forest areas affects Forico’s cost and asset base and the non-timber benefits that they provide to the community. These broader benefits of native forest management largely go unrecognised and, as a result, there is a poor understanding of the breadth and value of the connections between Forico, its local

community, and other parts of the Tasmanian economy.

The Project

Guided and supported by IDEEA Group, the “Accounting for Forico’s forest assets” project focused on extending traditional types of corporate accounts to embrace environmental and social factors. Specifically, this involved (i) accounting for the stock and changes in stock of ecosystem assets held by Forico and (ii) accounting for the flow of ecosystem services supplied by these assets (i.e. beyond plantation fibre production). The project has demonstrated how relevant information can be compiled and integrated with more traditional measures to fully account for assets and income.

The project built on the United Nations’ recently established framework for ecosystem accounting - the System of Environmental-Economic Accounting (SEEA). The project is a world-first in applying SEEA’s ecosystem accounting framework to forestry at a corporate level.

Following the SEEA methodology and framework, accounts for the Forico estate were developed for:

- Ecosystem extent, in terms of the composition of different vegetation types.
- Ecosystem condition, in terms of assessed characteristics relative to a highly productive reference condition.
- Ecosystem services supply, covering plantation harvest, recreation, habitat provision, water filtration, flood mitigation, carbon sequestration, and so on.
- Ecosystem services use, identifying the various beneficiaries of these ecosystem

services including Forico, government and local communities.

- Extended balance sheets and operating statements, showing the inclusion of data on ecosystem assets and ecosystem services flows alongside standard reporting entries.

Using geo-spatially referenced data collected by Forico, demonstration accounts for ecosystem extent and ecosystem services supply were compiled for the Forico estate.

The Outcomes

Establishing the information set to recognize and report on native forest areas within the Forico estate was achievable, but not quick or simple. Additional investment in data capture is required. In terms of delivering value for this investment, however, the project has clearly demonstrated the benefits of adopting a systematic and structured approach to building integrated environmental-economic accounts.

Specific outcomes of the project included:

- Native forest areas can be considered assets that supply services of value to both the company directly and to the broader community, in line with corporate social responsibilities.
- Information can be developed to support measurement of ecosystem service flows which can, in turn, be linked to future income streams when markets for ecosystem services, such as carbon sequestration, are more developed.
- There is potential to estimate more comprehensive valuations of native forest areas that encompass the value of non-timber ecosystem services. These might be recognised on balance sheets or give rise to other new revenue streams.
- It is possible to compile extended accounts encompassing information on the condition of ecosystems and flows of ecosystem services. This would improve the presentation of environmental data by making it more accessible and actionable in terms of improving environmental management practices.

- The benefits associated with high conservation value (HCV) areas managed by Forico can be more formally recognised both within Forico and among external stakeholders such as the Forest Stewardship Council (FSC), to support certification compliance. FSC International is currently drafting an Ecosystem Services Standard which may present another opportunity for Forico.
- Providing the foundation for Forico to develop a robust spatial database that integrates ecologically meaningful data and standard economic and financial information, thereby complementing the forest management picture.

The Next Steps

Overall, the project revealed that it is possible to incorporate a broader range of information as integral parts of economic decision making processes, and hence assess a more complete range of trade-offs between different management options over both the short and long term.

Information concerning ecosystem extent is largely in place. Additional work is required to develop (i) estimates for ecosystem condition, (ii) physical flows of ecosystem services, (iii) the spatial allocation of management costs and (iv) the value of ecosystem services in monetary terms.

Ultimately, a complete picture of the Forico estate can be established that will demonstrate the analytical potential of the SEEA ecosystem accounting approach. Ideally, the collection of ecosystem accounting data should mirror the collection of other data that normally takes place for productive plantation areas of forest. The project has proven the value of ensuring that information on all areas within the estate are appropriately integrated within geo-spatial and accounting information systems.

Forico and IDEEA Group are continuing to discuss other ways in which the outcomes from this first phase of work can be implemented.

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