Reconciling nature conservation and agricultural production

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In the southern highlands of Tanzania, a local variety of avocado has long been grown, but only sold locally and at low prices. A loan from African Wildlife Capital, which is tied to strong conservation covenants, facilitated local farmers' access to international markets by grafting local varieties with the high-value Hass variety, thus improving local livelihoods and securing forest protection.

Ninety percent of the world's demand for avocado is for the durable Hass variety. Rungwe Avocado Company (RAC), a commercial avocado growing, processing, packing and exporting business founded in 2009, embraced agricultural innovation, grafting the high-value Hass variety onto existing local variety avocado root stocks. The company benefits from bringing its Hass avocado to market during a three-month supply gap, when other global suppliers are unable to meet demand.

RAC is located in the montane conservation complex made up of Mount Rungwe Nature Reserve and Kitulo Plateau National Park. The forest reserve includes a wide diversity of habitats, leading to exceptionally high biological diversity with more than 120 endemic species, and is home to threatened animals. The Kitulo Plateau is referred to by locals as Bustani ya Mungu – the Garden of God. The forested catchments feed Lake Nyasa (also known as Lake Malawi) and numerous villages and towns. Lake Nyasa hosts the richest freshwater fauna in the world, 99 percent of which are endemic. Approximately 2 million people depend directly on Lake Nyasa for their livelihoods; thus, the protection of the watershed is a priority for securing regional environmental and economic well-being. The forests of the region are threatened by degradation and deforestation driven by poorly diversified livelihoods, population growth, demand for land and agricultural expansion, demand for timber, non-timber forest products, fuelwood and charcoal.

African Wildlife Capital (AWC) was established in 2011 by the African Wildlife Foundation, as Africa's first investment vehicle for conservation enterprise. AWC harnesses the positive power of private-sector capital to support small and medium



enterprises that demonstrate the potential for sustainable economic growth while leveraging conservation outcomes.

Recognizing the ecological significance of the Rungwe landscape, and the opportunity to engage small farmers in Rungwe Avocado Company as a means to foster livelihood diversification and alleviate the drivers of forest degradation and deforestation, AWC provided a US\$ 950 000, seven-year loan to RAC in June 2011 to help them expand their production and to engage outgrowers.

AWC loan agreements are not like any other. In addition to the financial requirements and covenants, AWC includes a broad array of conservation covenants onsite and off-site, covering forest, wildlife, soil and water conservation. They require specific conservation and socio-economic measures that a company must fulfil. Any non-compliance is a breach of contract.

RAC is using an outgrower model to source avocados for the export market, thus supplying access to a high-value market to local farmers. RAC is currently engaged with 4 000 outgrowers in villages in the surroundings of Mount Rungwe Nature Reserve. Each of these farmers signs a conservation agreement with the company that binds them to conservation performance. In the long term, RAC is expected to result in an increase in income to communities, the adoption of improved on-farm conservation and sustainability practices, and increased incentives to support the conservation of remaining forests – and ultimately, in a decreasing need to expand production and resource extraction in the forest. As the number of community members involved in the project increases, other spin-off enterprises compatible with the ecosystem will be introduced. One example is beekeeping, to produce and market honey, and to increase the yield of avocado orchards by enhancing pollination.

The AWC-RAC loan agreement has over 75 conservation covenants that bind the borrower, the borrower's employees and the outgrowers. The following are a selection of the covenants:

- Broad-Based Conservation Covenants: outline restrictions, practices and ethics to ensure the conservation of the greater landscape and ecological integrity of the region. Examples include:
 - optimize community engagement, employment and earned income as a means of providing an alternative to unsustainable natural resource extraction from the natural ecosystem;
 - not engage in poaching of wildlife or illegal or unsustainable natural resource extraction; and
 - deploy meaningful ways of educating the borrower's employees and outgrowers on the ecological values of the larger landscape.
- 2. On-Site Conservation Management: includes land use restrictions and prescriptions to ensure conservation practices in farmed areas. The loan agreement requires a baseline audit and annual monitoring of flora and fauna across the farm operations, and the development of a conservation plan. Specific covenants include:
 ensure that litter and waste are routinely collected and responsibly disposed of;
 - ensure that uncultivated areas are converted to conservation areas for the protection of natural flora and fauna and to prevent the introduction of exotic and/ or invasive species; and
 - \bullet increase tree cover for biodiversity, carbon sequestration, food production and/ or wood use.
- 3. Environmental Covenants: include restrictions and use prescriptions in the following areas: water conservation; energy use; soil conservation; use of chemicals, fertilizers and pesticides; integrated pest management; water management.

Lessons learned

- Linking conservation covenants to loans for private business development facilitates reconciling nature conservation with economic development.
- Linking local communities to markets and a profitable export business can help ensure long-term mutual benefits for people and the environment.
- Win-win partnerships between conservation agencies, business companies and local communities are feasible and successful.



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References and further reading

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This case study is part of the publication *Investing in sustainable mountain development: Opportunities, resources and benefits.* The publication looks at investments from the perspective of sustainable development. It presents 19 case studies from mountain regions around the world, covering efforts by diverse public and private actors, and ranging from classic examples of development investments to innovative financing mechanisms specifically tailored to the local context and conditions. The publication concludes with specific messages on mountain development, addressed to policymakers.

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