

COMACO Profile: Introduction

Throughout the 1980s and 1990s the food and income security of rural Zambians was continuing to decline, deforestation was increasing, and wildlife populations were being depleted at an alarming rate. Little was being done to help farmers, and the response to illegal hunting and charcoal production was to arrest and imprison the “criminals” even when this meant sentencing their families to chronic hunger and poverty.

Starting as a pilot project in 2003, Community Markets for Conservation (COMACO) became legally registered in 2009 as a social enterprise in Zambia to help address these challenges as a self-financing business model. Its strategy is based on a business “deal” between the COMACO business and the COMACO farmer. The business commits to making conservation profitable while the farmer commits to making conservation happen by adopting sustainable farming practices and abandoning poaching and wasteful tree cutting.

Sixteen years later, over 179,000 farmers in the Luangwa Valley are active members of COMACO spread across 76 chiefdoms covering over 10.5M hectares of communal land. 52% of these farmers are women. The majority of these farmers entered the program with risks of hunger and malnutrition and poverty-level incomes without the skills and markets to reverse their socioeconomic situation. Today, 86% are food secure, income levels have more than tripled, farmer cooperatives exist to support farmer needs and help enforce community conservation plans, and rates of tree loss and wildlife poaching in most areas are declining.

Methods – the COMACO model

The COMACO model is simple. Farmers gain access to valuable technical services, higher farm-gate prices, and a COMACO dividend payment if they comply with a relatively small set of conservation farming and natural resource conservation practice standards. Compliance is founded on the principal of collective culpability. This means that if a few farmers in a community, as defined by their local chief, fail to comply with these rules all farmers in the community risk losing the privileges provided by COMACO membership. Compliance with COMACO standards is high because of a cooperative organization at the chiefdom level that self-monitors and trains farmers to maintain compliance to qualify for benefits of being a compliant member of COMACO.

Over time, these rules become improved and more community-specific as cooperative working with their traditional ruler help to help formulate their own Community Conservation Plan and seek great commercial benefits derived from its adherence. At this stage, community enforcement of this plan is a key component of conservation compliance.

In return for complying with farming best-practices, and regulations designed to conserve wildlife and forests, cooperative members received four primary benefits: 1) higher farm-gate prices at harvest time, 2) training on how to maintain soil fertility and increase agricultural production sustainably, 3) lower seed costs and loans to support COMACO farmers with quality seeds produced by cooperative members who are certified seed growers, and 4) a dividend paid to the cooperative based on an annual conservation compliance audit to help finance and expand farmer support service.

Farmer training

Cooperative members receive training in three principle ways to increased effectiveness and cost-efficiencies in crop production for both food and income security:

- Year-round, weekly “Farm Talk” radio broadcasts blanket rural communities with aspirational programs on farm skills and their potential benefits,
- Local language skills manual called the “Better Life Book” enables farmer groups to self-train as if they were “classrooms” when they meet 2-3 times/month level, and
- Cooperative-supervised lead farmers promote best practices by convening farmer school days and visits to demonstration plots to observe best practices first-hand.

To support increased yields and reduced input costs for upland farming systems, members learn about staple crop rotation with nitrogen fixing legumes (soy and ground nut), alley cropping with a fast-growing nitrogen fixing tree (*Gliricidia sepium*), optimum spacing of crop plants and timing of planting, use of compost to build up organic matter in the soil, use of leguminous cover crops to reduce weed competition and add nitrogen to the soil, minimum tillage to reduce soil erosion and minimize soil nutrient loss, and protection of crop residues from fire and livestock so that they can be incorporated back into the soil.

Gliricidia trees are coppiced to knee height when crops are planted to avoid shading of emergent crops. Their leaves, which contain 3-4% nitrogen, are stripped and used as basal fertilizer and their cut woody stems are allowed to dry and used as fuel in locally produced fuel-efficient cook stoves. During the non-planting season, *Gliricidia* leaves are used for compost, as green manure and as a repellent for insects in household granaries. As a deep rooted tree, *Gliricidia* promotes mineral cycling of important micronutrients that expensive chemical fertilizers fail to offer.

The COMACO business model

With capital initially raised from donors but now generated from the sale of its own brand of value-added products called *It's Wild!* or from high-valued commodity trades, COMACO buys raw commodities from producer group members at harvest time.

Its supply chain system provides contracts to cooperatives for bulking crops in quantities that make payment and collection cost-efficient while creating a business opportunity for the cooperatives themselves and removing the cost of middle-men traders who tend to be exploitative. In this way, COMACO is able to offer farmer top market prices, often 3-5% above the prevailing market price. It does this in two important ways: by processing and packaging commodities into high quality products for retail markets or for onward sale to premium commodity trade because of the quality of raw commodities that COMACO can offer.

As a brand promise to its consumers, COMACO manufactures healthy, nutritious products sourced only from farmers who sign a conservation pledge as a pre-condition for being a COMACO farmer. Key components of COMACO's business model that characterize it as a commercially viable social enterprise are:

- Products can attract high value return for farmer producers because of their quality and nutrient value and because of the social and environmental impact story behind the brand

- COMACO's well-placed processing plants and warehousing infrastructure supports a cost-efficient way of moving commodities from more remote sources to varied markets
- Cooperatives are an integral part of the supply chain and contribute to a growing array of products that COMACO supports for their continued commitment to conservation
- COMACO trains cooperatives to engage in commercial activities of their own and where sales and distribution services make sense, COMACO assists.
- COMACO is a not-for-profit business registered in Zambia, so all net-revenue is reinvested back into the business.

Performance payments for conservation

Each year all cooperatives are audited to assess their compliance with their Community Conservation Plan and COMACO standards. The audit assesses the cooperatives performance in four areas: agricultural practices, wildlife conservation, forest management, and community leadership and governance. Audit teams are composed of COMACO employees and government district staff in relevant ministries.

Conservation dividend payments are a recent innovation, which was preceded by premium commodity payments that offered 10-15% above market price for conservation compliant communities. As conservation compliance became increasingly influenced through the leadership of cooperatives and local traditional leaders, COMACO shifted the payment to a 90% payment to cooperatives and a 10% payment to the local chief with future payments conditional on an COMACO-led audit review of the accountability and use of funds from any earlier dividend payments.

COMACO anticipates future assessment of compliance monitoring will improve both quantitatively and in relation to parameters that can better drive community commitment to manage and protect farm soils and local forest and wildlife resources. The process is an interactive collaboration with stakeholders and partners contributing to the COMACO model.

Landscape management and carbon markets

COMACO began discussions with local chiefs in 2012 to establish Community Conservation Areas to safeguard the forests and wildlife of Zambia's Eastern Province. By 2018, 38 Community Conservation Areas have been established that cover 317,000 ha of forest land. The Areas are patrolled by teams of COMACO-trained community forest guards. In 2015 COMACO started working with The World Bank on Zambia's first large-scale carbon project. Under a pilot initiative with nine chiefdoms, COMACO estimated the quantity of CO₂ that would not be released into the atmosphere as a result of avoided deforestation and carbon retention from sustainable agricultural practices. In 2017 it verified 214,965 tCO₂-e (equivalent carbon credits) on behalf of these communities and transferred to community accounts a total of \$US 489,369.70 for the sale of these credits to the World Bank.

COMACO is currently working with 28 additional chiefdoms to expand the carbon project to serve communities across the Luangwa Valley. Many of the target areas for the project expansion are important wildlife corridors that will help connect fragmented forests and greatly aid in the effort to rebuild the Luangwa Valley's elephant population.