

Community Markets for Conservation: Improving Rural Livelihoods around Natural Resource Management

What is COMACO?

Community Markets for Conservation (COMACO) is a business model for rural development that links markets, agriculture and natural resource management in a way that addresses core needs of poor, food insecure families. As a rural marketing scheme, COMACO rewards farmers with increased commodity prices for adopting improved land management and farming practices that can sustain higher food crop yields while reducing potential conflicts with natural resources. By targeting households unable to sustain basic food and income needs, COMACO reduces reliance on coping strategies that degrade natural resources. The program currently operates over large landscapes of Eastern and portions of Lusaka and Northern Provinces, especially around national parks and protected forest areas, with sufficient involvement by local residents to build increased community commitment and capacity to conserve watershed and wildlife resources. Its business approach encourages market synergies between wildlife, agriculture, forestry and fisheries through a careful selection of commodities and production practices that enhance natural resource management.

COMACO (Community Markets for Conservation) Principles

COMACO is a pilot program under development since 2003. It is based on certain principles or concepts that help guide its strategy for supporting conservation through the development of appropriate markets and market-oriented livelihood skills. These principles include:

- Markets drive land use practices and shape rural livelihoods, and in so doing, form the basis of local attitudes and perceptions toward conserving natural resources.
- In rural areas where landscapes support appreciable natural assets, families unable to feed themselves or meet basic income needs increase risks of natural resource degradation by adopting coping strategies harmful to natural resources.
- Poverty and hunger contribute to a range of social costs that exacerbate the cost of protecting natural resources
- Rural economies driven by closer relationships between markets and natural resource management create added value benefits for improved national economies.

COMACO Hypotheses

Selected hypotheses, listed below, provide an experimental framework for testing COMACO's capacity to apply these principles and their relevance to conservation and human well-being.

1. Land use patterns will favor improved natural resource management when the total value of income benefits from COMACO-supported commodities minus indirect costs for adopting conservation practices to produce these commodities exceed the total value of alternative markets minus the cost of not adopting conservation practices.
2. Low-income rural households are able to sustain long-term income needs through COMACO's market incentives for improved farming practices and natural resource management.
3. Cost-effectiveness of enforcing conservation regulations across rural landscapes will increase through COMACO's combined influence on poverty and food shortages.
4. Household attitudes to conservation will improve in response to increased food security and income when derived from COMACO's influence on income sources and associated production practices that favor the need for conservation.
5. Income wealth to the country from the added value benefits of COMACO will exceed the investment costs of establishing COMACO as a self-financing approach to managing rural landscapes across the Luangwa Valley ecosystem.

COMACO strategy

COMACO operates largely around a community shareholder-owned company, the Conservation Farmer and Wildlife Producer Trading Centre (CTC), which is able to mobilize large-scale involvement of economically marginalized, food insecure families into viable trade guilds who help reinforce natural resource management. The company draws its board members from different levels of society and professions, including the producers themselves, to help fulfil the CTC's mandate to build a better life for rural people around trade and conservation. Board members and other collaborating partners cooperate to develop commercially successful products from commodities produced by participating communities. The CTC funnels profits into community shareholders for investment in COMACO livelihood objectives and offers competitively higher prices for COMACO-supported commodities, provided producers adopt improved farming and land use practices that lead to more sustainable solutions for income, food security, and conservation.

The CTC works through a network of trading depots located in rural areas. These depots serve as trading hubs where producer group members market and receive direct payment for their produce, as well as price bonuses for conservation compliance. They also serve as community centres for providing training in appropriate livelihood skills and coordinating relevant information about market opportunities guided by improved land use practices and production technologies. This process reinforces the community pledge to honour their land use plan, a requirement under the COMACO model, in return for improved markets and trading services.

Verification of predictions in support of COMACO hypotheses

The COMACO strategy focuses on the role of markets in promoting joint objectives of natural resource management and improved rural livelihoods. For countries with emerging economies and a dependence on its own natural resource base to sustain long-term economic development, COMACO has special importance as an appropriate model for integrating markets, conservation and rural development and as a national strategy for protecting and managing natural resources in Zambia. To validate the COMACO model for broader application in Zambia, monitoring and evaluation results will examine a number of key predictions generated from these hypotheses. A sample includes the following:

- Low-income households will adopt and remain committed to new livelihood skills that promote food security and income diversification in response to COMACO trade incentives.
- Trade activities centred at community depots will sustain increased flow of community-wide information and skills sharing for improved production of commodities marketed by COMACO and improved adoption of conservation-friendly land use practices.
- COMACO trade benefits linked to improved farming practices will maintain a majority household compliance to conservation farming, composting, crop rotation and adoption of desired crops with zero dependence on pesticides among registered COMACO farmers.
- Incidence of illegal or destructive use of natural resources (snaring, poaching, waterhole poisoning, bushfires, over-fishing, unregulated charcoal making, etc.) will decrease as income and food security levels rise among COMACO beneficiaries.
- Families benefiting from COMACO will increase their capacity to remain a nuclear family (e.g. spouses remain together, children complete schooling, etc.) with increased means to sustain basic social needs as education and health care.
- Required expenditures to regulate resource use and enforce natural resource protection laws will decline as COMACO markets increase and leverage improved rural livelihood benefits.

- Community Resources Boards, whose primary revenue source is a share of safari hunting licenses, will invest a portion of this revenue in COMACO-related activities (e.g. skills training, farmer inputs, etc.) to promote increased wildlife production and revenues.
- Luangwa Valley's tourism sector will seek and support COMACO markets as the decline in land use conflicts and their potential threats to tourism become documented and attributed to COMACO.
- Species of wildlife most affected by snaring and illegal hunting (and most vulnerable to local extinction, e.g. wild dog, roan, wildebeest, etc.) will show increased levels of population production in areas where COMACO operates.
- The cost and associated risks of introducing wildlife species in areas where these species have become locally extinct are less in COMACO operates than non-COMACO areas.

Where are COMACO results published?

Access to COMACO results is available on the COMACO website, <<http://www.itswild.org>>, published by Wildlife Conservation Society. The website provides updated information on monitoring results with formal papers available as .pdf files in its library listing. Monthly newsletters featuring human-interest stories that depict COMACO's impact on rural households and on-going COMACO activities also appear on this website. In addition, the site offers a forum board for readers to post their views, questions and suggestions with published replies from COMACO field staff to broaden public understanding and debate on the COMACO approach and methods. Another purpose of the website is to advertise and help market products produced and sold under the COMACO brand name, *It's Wild!*

Who is COMACO?

COMACO is a multi-stakeholder program initiated and stewarded by Wildlife Conservation Society in close consultation with Community Resources Boards of Luangwa Valley, District Council authorities, and key Government institutions, such as Zambia Wildlife Authority and Ministries of Tourism, Environment and Natural Resources, Agriculture, and Local Government. World Food Programme and Food and Agriculture Organization have contributed significantly to COMACO's development by providing input assistance to food-impooverished families. COMACO uses this assistance to organize farmers into producer groups who adopt improved farming and land use practices as a condition for receiving these inputs and as market incentives are introduced to sustain the process. Various donors support the COMACO program, and a full listing is provided in its website. Most notable are Wallace Global Foundation, Royal Norwegian Embassy, Japanese Embassy, DFID, USAID, and CARE International. Collaboration with Cornell University provides increased peer review and technical oversight by distinguished scientists in applied life sciences.

COMACO's future

COMACO comes at a time when most rural communities in Zambia are not able to sustain seed inputs, fertilizer needs, local food reserves, extension services and favourable, more diversified markets. This has made many communities acutely vulnerable to the effects of poverty and hunger, aggravated especially by crippling episodes of drought. COMACO will demonstrate that such problems are locally solvable when communities are structured to own, lead and participate in fair market opportunities that reward producers for adopting sustainable agricultural and land management practices. With increased data to affirm these results and refine methodologies, Wildlife Conservation Society, working with its partners, hopes to expand the COMACO program to different Districts in Zambia. Newly developed collaboration with Program Against Malnutrition and Food Reserve Agency of Zambia has begun to more effectively support these expansion efforts.