Successful approaches for promoting best-practice adoption

Lessons for sustainable community-based natural resource management in Tanzania

Implementing effective community-based natural resource management (CBNRM) programs requires community members to adopt more sustainable practices for managing the resources they use for their livelihoods. The experience of the CARE-WWF Alliance in Nachingwea District of southern Tanzania confirms that such behavior change can be challenging. One local community has been particularly reluctant to participate in CBNRM for fear of losing the natural resource rights upon which their livelihood security depends. Drawing on experience in agriculture, this learning brief highlights successful approaches for promoting community adoption of best practices in CBNRM and beyond.

Community Learning Exchanges Provide Opportunity to Show Not Tell

Community members in Kiegei B, a village in the Alliance’s project, refused to approve a proposed village forest management plan or to form a Water User Group. Community members, especially those engaged in illegal logging and mining, expressed concerns about losing access to their forest and water resources. One key strategy the Alliance employed to address Kiegei B’s reluctance to participate was a learning exchange with a model community already deeply engaged in CBNRM. The Alliance arranged for 17 village leaders and Village Natural Resource Committee members from Kiegei B to visit a nearby district to see with their own eyes the benefits of engaging in participatory forest and water management.

The cross-community visit helped key influencers in Kiegei B understand how activities could generate tangible new benefits while enabling the community to maintain control of its natural assets. For instance, local enforcement of water laws required a handful of farmers to move their fields at least 60 meters away from the river so that the community, forest, and wildlife could then benefit from improved water flows. After the learning visit, an elder apologized for undermining this effort because it threatened his farmland.
He explained, “I am sorry for the inconvenience that I caused – it won’t happen again. Now I have seen that communities can benefit from their resources.”

Exchange visits harness the power of peers showing the benefits of an intervention. This is far more effective than an NGO explaining the benefits of the same intervention—for those who attend. Since it wasn’t possible to coax all reluctant Kiegei B leaders on the learning visit, the Alliance tackled the remaining influencers through a Community Score Card exercise, a participatory tool that empowered community members to evaluate the quality of village natural resource management leadership (to learn more about this governance exercise, see *Effective strategies for improving policy implementation and law enforcement at the community and district level in Tanzania*). Despite transforming the minds of several leaders, Kiegei B has yet to approve the forest management plan or form a water user group.

The Alliance in Nachingwea has been arguably more successful in influencing community members to adopt sustainable agricultural practices. Given the development field’s strong focus on behavior change, the remaining examples unpack how successful approaches for promoting agricultural behavior change in Tanzania might provide insights to accelerate adoption of sustainable natural resource management practices in the same communities.

**Demonstration Plots and Training of Trainers Key to Practice Adoption**

Capacity building is a common approach to promoting best practice adoption in both conservation and development sectors. CARE’s approach to Farmer Field and Business Schools (FFBS) in Tanzania reaffirms the power of demonstration and illustrates how Training of Trainers (TOT) can accelerate uptake in a wider geography.

The Alliance’s 2016 baseline assessment in Nachingwea showed that fewer than one-third of farmers practiced even one climate-smart agriculture (CSA) technique. Rather, farmers still practiced traditional slash and burn agriculture to regularly open new fields and prepare the soil for production. Yet competition for scarce, fertile land and our changing climate make this approach increasingly unsustainable. Through Alliance FFBSs, smallholders learn techniques like the use of crop rotation and improved seeds that are more tolerant to variable rainfall and diseases — that reduce the frequency with which farmers need to open new land while also producing higher yields.

FFBS function by setting up systematic demonstrations on agricultural plots
where farmers experiment with and observe traditional practices and seeds side-by-side with CSA practices and improved seeds. Member farmers, and non-member observers alike, noticed that crops produced with CSA and improved seeds were more resilient and productive. Armed with new confidence in their learning capacity and knowledge, some farmers began applying CSA techniques to their own plots. In the 2018 season, farmers adopting CSA practices and seeds on their own plots increased sesame production by more than half compared to those using traditional practices and local seeds harvested.

The Alliance has multiplied FFBS impact through TOT at two levels. The Alliance employs a TOT methodology to train both government extension agents and community paraprofessionals to facilitate day-to-day CSA mentoring and FFBS activities with community members. As the learning brief “Effective strategies for improving policy implementation and law enforcement at the community and district levels in Tanzania” explores in greater detail, a 2017 TOT for Nachingwea District Agricultural Officials and Ward Extension Officers also underlines how training influencers, in particular, can create the enabling conditions for wider best practice adoption.

In short, the FFBS model successfully promotes farmer adoption of CSA because it gives risk-averse smallholder farmers a low-risk environment in which to experiment. Through learning-by-doing, FFBS members both build their capacity for technical best practice and collective action. Importantly, through their collective labor, they also witness the tangible benefits of new approaches relative to traditional ones. Moreover, training others to implement the FFBS curriculum or to otherwise promote CSA increases the number of people who learn about CSA.

Local Businesses Address Seed Supply Gap Identified in Baseline

When the Alliance began work in the Nachingwea District, the majority of farmers were using low-yielding sesame and cassava seeds with a long maturation period and vulnerability to pests, diseases and increasingly variable rainfall caused by climate change. Beyond improved seed promotion through FFBS, the Alliance sought to ensure a sustainable supply of improved seeds locally.

A Nachingwea pilot baseline study revealed that just one in 10 farmers had local access to seeds in 2016. The Alliance, therefore, helped two farmers each in each of the four pilot villages establish seed multiplication businesses. Working with additional partner organizations, District Agriculture Officers trained eight FFBS members on seed production, business and entrepreneurship. These farmers developed specialized knowledge and skills needed to prepare 24 acres of land for multiplication of sesame and cassava seeds. In the first year, one farmer earned so much income (about US$2,500) that, in the second year, he expanded his area for seed cultivation.

The Alliance also connected the seed multipliers with the Tanzanian Official Seed Certification Institute and the

By definition, participatory forest management in Tanzania harnesses market forces through community implementation of a sustainable harvesting plan that generates income for both forest management and community development initiatives. Recently, Kiegei B took notice when a majority of village timber profits went to the district government instead of the community. After seeing their resources exploited for others’ benefit, they reversed course to demand—the Community Score Card—approval of the proposed Village Forest Management Plan. Approval of the management plan in February 2019 ensures that 95% of profits from sustainable timber harvesting stay in the village.
Improved Seed Producers Association in Southern Tanzania to widen their access to markets, loans and other seed-specific business assets.

The baseline survey was crucial to evaluating communities’ starting places, both in terms of access to inputs and application of best practices. Regarding access to seeds, the survey drew attention to the reality that most farmers had to travel a significant distance to access any seeds, much less improved seeds. The Alliance then employed a markets-based approach to develop commercially-viable seed multiplication businesses. Today, these businesses have generated not only a steady supply of improved seeds for local farmers (both in FFBS and beyond) but also reliable income for the seed multipliers.

Conclusions

Taken together, adoption of both CSA techniques and wider access to improved seeds has begun to transform the sustainability of small-scale agriculture in the six project communities. Broadly, four key lessons for community adoption of best practices follow:

**BASELINE STUDY CRITICAL FOR INTERVENTION DESIGN**

A baseline is a critical starting place to formulate integrated conservation and development interventions that meet each community where it is. If well-designed, a baseline assessment allows intervention designers to evaluate the implementation of best practices and any barriers to adoption. It also facilitates measurement of change in adoption rates over time.

**CREATE OPPORTUNITIES TO LEARN EXPERIENTIALLY THE BENEFITS OF BEST-PRACTICE ADOPTIONS**

Learning by seeing or doing includes: learning exchanges with a best-practice-adopting community; low-risk experimentation with traditional versus best practices; and demonstration areas to showcase the benefits of best practice application.

**USE MARKETS TO ADDRESS GAPS AND BARRIERS**

A baseline can be critical to identifying economic barriers to best practice adoption. When possible, use markets to fill identified gaps and create sustained solutions with financial incentives to drive best practice adoption.

**TOT MAXIMIZES UPTAKE**

Extending capacity building beyond community members to diverse service providers expands the geographic reach and uptake of best practices.

These successful Alliance approaches to promoting best practice adoption in sustainable agriculture may provide insights that could be applied to move reticent communities, like Kiegei B, toward CBNRM best practice.

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This learning series was co-authored by EcoAgriculture Partners and the Alliance.

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