

SECURING OUR FUTURE: Sustaining and Regenerating our Agriculture

Agriculture sits at the nexus of some of the most pressing challenges of our time: food security and nutrition, sustainable livelihoods, water and soil quality, biodiversity, and climate change. Overlooking these interlinkages will put the agricultural sector on an unsustainable trajectory.

This could be the case for Ethiopia - if the country continues to scale up agricultural value chain interventions that narrowly focus on a few commodities and aims at maximizing yields over the short-term - without examining associated trade-offs and synergies.

The Government of Ethiopia has an unwavering commitment to implement the policy actions that will address food security, land degradation, nutrition and climate change aimed at achieving multiple development targets. This includes inclusive and sustainable agricultural transformation with greater productivity, competitiveness, and sustainable use of natural resources. Particularly in the transition from subsistence to commercial farming, the Ministry of Agriculture and the Agricultural Transformation Institute are actively supporting farmers organized in commercialization clusters in selected woredas. At the beginning of this month [ATI reported](#) 20 to 50% marketable surpluses over the last two years for farmers organized in this clusters.

Several challenges still require further attention. Estimates suggest climate change may reduce [Ethiopia's GDP up to 10% by 2045](#), largely through drought-induced impacts on agricultural productivity. This will be compounded as productivity gains still come at the expense of resource degradation. Recent studies estimated [US\\$ 4.3 billion loss to land degradation annually](#) coupled with total cropland expansion by [14.4 million hectares by 2030](#), and half of the total new agricultural land will be converted from forests.

Gaps in nutrition is also still a challenge. Chronic and acute child malnutrition and micronutrient deficiencies need to be eliminated. The cost of nutritious diets is unaffordable, costing four times that of energy-dense diets (offer a low-cost dietary option to the consumers but more likely to be nutrient-poor). A steady supply of and greater access to fresh vegetables, fruits, and legumes will be essential to boost diet diversity and achieve improved human health.

To overcome these related food and land use challenges, Ethiopia can build further on the initial success of its commercialization clusters by stimulating more sustainable and regenerative agricultural practices.

Such practices include:

- ▶ Diversifying crop selection: growing fruits and vegetables, which can provide higher returns per hectare and improve nutrition; growing pulses such

as beans, lentils, and peas, which can restore soils and supply inexpensive, low-fat protein, fiber, vitamins, and minerals; and planting cover crops, that can provide feed for livestock and prevent soil erosion.

- ▶ Better planning of crop rotations: which help manage pest and disease outbreaks as well as diversity farmers' income streams.
- ▶ Restoring degraded farmlands
- ▶ Integrated farming: which includes growing crops, and trees, and raising livestock in a more integrated manner.

Combined, these practices can create positive synergies on farms and within agricultural landscapes by increasing crop productivity, soil fertility, water retention, or other ecosystem services.

If well designed and implemented, these practices will result in multiple positive economic, health, and other social and environmental impacts.

For example, recent studies across [Sub-Saharan Africa show how regenerative agricultural practices](#) have increased annual crop yields considerably. Companies such as Touton reported a 68% annual yield increase through its agroforestry program, and Olam highlighted an 80% increase in cotton lint yields through regenerative techniques, which included mulching and crop rotations. Likewise, Nespresso reported that individual farmers who fully embraced regenerative practices such as regular pruning and rejuvenation of their coffee trees were seeing up to a 300% increase in yields.

Finding these innovations, however, is not straightforward because they need to be well designed to fit local agro-ecological and economic conditions. In addition, more information on transition cost will be needed as decision-makers must balance trade-offs between short and long-term cost and benefits related to the economy, environment, and society. Finally, identifying all these innovations will require a process that is credible to farmers and motivates companies and other stakeholders. It will also require new policy actions and suitable incentives that can be helpful to overcome tradeoffs and deliver support on the ground.

In response to the challenges and opportunities outlined in this article, the Ministry of Agriculture, the Agricultural Transformation Institute, the Ethiopian Institute of Agricultural Research, Sasakawa Africa Association, and the Food and Land Use Coalition have formed an Action Coalition for Sustainable and Regenerative Agricultural Commercialization. The Coalition aims to identify the available evidence and produce a detailed roadmap for action with key stakeholders in the coming months. **The buy-in of this approach by millions of our smallholder farmers coupled with continued productivity improvements will further enhance Ethiopia's food security, economy, and the future of us all.** We all have a part to play.

