

Sustainable Agriculture: A Way Out of Food Poverty

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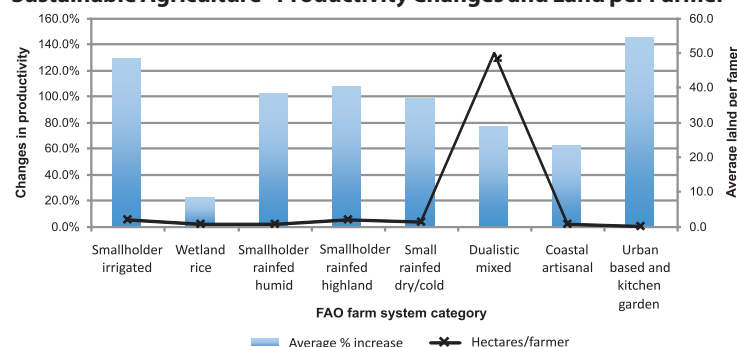
The most fundamental human right is the right to food (UN General Assembly, 2002). Proper nutritious food is the precondition for normal human development. Well-nourished children are more likely to succeed in learning and are less susceptible to diseases. But low-income, food-importing economies are facing increasing difficulties in accessing staple food items. Chronic food insecurity persists, especially in Sub-Saharan Africa. The recent economic crisis drove more than 100 million people into hunger in 2008 alone.¹ Is sustainable agriculture a solution?

Industrialised agricultural production and the global commoditisation of basic food staples have not helped improve domestic food consumption in many developing countries, especially among net food importers. Neither has higher production demonstrated long-term efficiency or sustainability: the short-term gains of increased productivity are often offset by the high costs of inputs and environmental degradation (World Resources Institute, 2005). Skewed food-trade patterns and the vulnerability of food exporters to growing threats of climate change further exacerbate the availability and accessibility of food, especially for the poor and vulnerable groups (UN Special Rapporteur, 2008).

The evidence from various developing countries reveals that sustainable agricultural practices, anchored in local knowledge, are the most effective in developing resilient food production systems (Pretty et al., 2006). Sustainable agriculture is driven by local knowledge and resource-conserving techniques, making the best use of nature's goods and services without damaging those assets. Investing in the capacities of small farmers to adopt sustainable practices will help secure higher yields and profits, and will promote local food consumption.

Methods such as integrated pest and nutrition management, water harvesting and minimum tillage boost yield and increase the nutritional value of food products. Such practices also preserve biomass and protect soil health. Over 12 million farmers in 57 developing countries experienced an average yield increase of 79 per cent after adopting sustainable practices (Pretty et al., 2006). These farmlands averaged three hectares, located in a variety of farming systems—irrigated, rain-fed, wetland, humid, highland, mixed and urban. The figure shows that the highest increase in yield, more than 120 per cent, was in smallholder irrigated farms, as well as in urban and kitchen gardens. Conservation methods, including organic agriculture, can achieve yields comparable to industrialised farming. Sustained over time they also generate higher profits from savings and drastically reduce conventional pesticide use (UNCTAD, UNEP 2008).

Sustainable Agriculture - Productivity Changes and Land per Farmer



Source: Prepared by the authors on the basis of Pretty et al. (2006).

The main lesson learned from the evidence is that adopting sustainable agriculture requires intense cooperation and knowledge building at the local level. While initially this may add to the transaction cost, the net medium-term payoff is still higher than industrialised farming, especially if the added benefits are taken into account—such as strengthened social dynamics, local natural-resource management and food self-sufficiency. As a group, women who engage in small-scale farming can be empowered by moving to sustainable practices, since this could give rise to longer-term land use and better household nutrition.

Development partners and national governments can leverage a policy shift in the right direction by prioritising investments that boost local food supply systems and markets on the basis of conservation methods. This may be an opportune moment to revise traditional “green revolution” methods, such as subsidising fertilisers and pesticides, and to explore low-cost, sustainable alternatives that help conserve land and water resources. Investing in local research and development geared to crop diversification, resilient local seed supply, and biodiversity is essential for locally generated responses to reducing food poverty.

References:

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Note:

1. UN High-Level Task Force on the Global Food Crisis: <www.un.org/issues/food/taskforce/index.shtml>.