Five pressing issues to be addressed by agricultural development

International agricultural development must broaden its scope to address food security issues, according to a new study. The research recommends removing boundaries between sectors to allow agricultural policy to account for impacts of macroeconomic trends, climate change and links between malnutrition and infectious disease.

Reducing global hunger and poverty has been high on the international policy agenda for some time, but the challenges faced today are different to those faced 30 years ago. The study focused on five key related issues that are affecting agriculture and food security and to address these, provides recommendations for capacity building and development projects.

1) **Agriculture, energy and financial markets.** A complex series of trends has caused food, energy and financial markets to become increasingly interlinked. Firstly food prices have become more unstable and prone to large and rapid changes when shortages occur. Some of this variability is rooted in the increasing demand for biofuels, meaning agriculture and energy prices are now linked. This instability is exacerbated by the ever increasing speed of transactions in financial markets. There is a need for better analysis of the connections between food, energy and finance and to set agricultural development policy within a more macroeconomic context.

2) **Climate Change.** Weather fluctuations and climate change can create widespread food insecurity as demonstrated when the Russian heatwave in the summer of 2010 destabilised the world wheat market. If these extremes become the norm, which is possible according to the IPCC’s predictions, then threats to food security will escalate. Adaptation as well as mitigation is needed, such as breeding crops for heat and drought tolerance, conserving crop genetic diversity for future breeding and promoting livelihoods outside of agriculture.

3) **Land use change and institutions.** Between 1990 and 2005, the amount of cultivated land in developing countries grew by 5.5 million hectares per year. This is often at the expense of forests, wetlands and other areas of ecological value, which can contribute towards climate change, biodiversity loss and social conflict. Brazil and Indonesia are two prime examples where rainforest has been converted to produce food and feed. In both countries, there are inadequate systems for managing land use, in particular, the systems of establishing land ownership. Since issues of poor land governance are site-specific, they need to be addressed at a community level.

4) **Farming systems for the ultra-poor.** There is a pressing need to change agricultural strategies for those caught in a poverty trap by their production of low-yielding, low value crops during a limited season. There are three key elements that could help here: small-scale distributed irrigation systems, the use of higher value crops and manure fertilisation, and better sharing of knowledge between smallholders. Projects that incorporate these should ensure constant community engagement from start to finish.

5) **Linking malnutrition and infectious disease.** Funding for malnutrition and disease programmes tend to be separate from agricultural programmes despite evidence of a strong link between the two areas. Nutritional deficiencies lead to poor immune systems, which increases the risk of infection from diseases including HIV/AIDS and tuberculosis. There is still much to be done to promote the combination of food, nutrition and health strategies

As evidenced by the five issues explored in this study, international policy needs to embrace a wider perspective on agricultural development to prevent food insecurity escalating.


Contact: roz@standford.edu

Theme(s): Agriculture, Sustainable development and policy assessment