

People-Centred Resilience

Working with vulnerable farmers towards climate change adaptation and food security

Globally, 1.7 billion farmers are highly vulnerable to climate change impacts. The many who are already hungry are particularly vulnerable. Yet scaling up localised ‘resilience’ successes offers hope for these farmers, while helping to address the climate problem. New thinking to recognise vulnerable farmers as critical partners in delivering solutions is needed to increase their resilience and to enable them to help combat climate change. Bold new public investment to the supporting institutions will be needed.

Summary

Worldwide, 1.7 billion small-scale farmers and pastoralists are highly vulnerable to climate change impacts. They live on marginal rural lands characterised by conditions such as low rainfall, sloping terrain, fragile soils, and poor market access, primarily in Africa and Asia. Such farmers are vulnerable because their farms depend directly on rainfall and temperature, yet they often have little savings and few alternative options if their crops fail or livestock die.

Many are already hungry, making them particularly vulnerable. World hunger currently stands at 1.02 billion people, its highest level ever. Over 60 per cent of hungry people are women, and hunger remains predominantly rural, though cities are catching up.

Given existing hunger and looming climate change, donors and national governments must take immediate action to help vulnerable farmers build their resilience in order to improve their food security despite climate shocks.

Achieving farm resilience requires building up the resilience of vulnerable farmers by developing their skills, expertise and voice while supporting their use of agro-ecological farming practices. A resilient farm can cope effectively with climate shocks while also producing more. Building resilience depends not just on how farmers manage resources, but on how well local, national, and global institutions support farmers.

The clearest evidence that sustainable agriculture remains limited is the widespread degradation affecting agricultural lands, with only localised pockets of environmental restoration. Around 384 million hectares of cropland in the developing world is degrading, affecting 1.4 billion people. In Africa, 65 per cent of agricultural land is degraded. Yet even after farms have 'collapsed' due to soil degradation, they can often be restored, and then resume a sharply higher level of productivity and capacity to cope with shocks.

Agro-ecological practices can empower vulnerable small-scale farmers, offering them both greater control over their lives and an accessible means of improving their food security, while decreasing their risk of crop failure or livestock death due to climate shocks. Vulnerable farmers can use agro-ecological practices to build resilient farms and improve their livelihoods, achieving multiple benefits: 1. improved food security; 2. adaptation to a changing climate; and 3. mitigation of climate change.

This mitigation potential is significant. It is estimated that agriculture could 'fix' gaseous carbon – and hence reduce net greenhouse gas emissions (GHG) – at a rate of 2–3bn metric tonnes of carbon per year for the next 50 years. Measures for doing this would include restoring degraded soils and planting trees. Vulnerable farmers may often live in poverty, but they could be powerful partners in the struggle against

climate change.

While the potential is huge for win-win-win outcomes, farmer adoption of agro-ecological practices is constrained by various barriers coupled with policy frameworks that emphasise external input-based strategies and largely neglect sustainable agriculture.

Vulnerable farmers also face growing threats to their land from big businesses that seek to produce food or biofuels. Increasing land scarcity and anticipated price rises for these products are fuelling a flurry of interest in acquiring developing-country land. Some 120 hedge funds, retirement funds, agribusiness companies, and private equity funds have recently invested in agricultural land in developing countries. The International Food Policy Research Institute (IFPRI) estimates that 15 to 20 million hectares (an area the size of Uruguay) have been under negotiation since 2006.

To secure 'win-win' outcomes instead of adverse outcomes, we must invest in marginal communities in order to build people-centred resilience. People-centred resilience consists of five principles which should guide how investments in vulnerable farming communities are designed and implemented. They are:

1. Restored and diversified natural resources for sustainability.
2. Responsive institutions grounded in local context.
3. Expanded and improved sustainable livelihood options.
4. Sound gender dynamics and gender equality.
5. Farmer-driven decisions.

Following these principles ensures that investments support farmers in their efforts to become food-secure and adapt to climate change. Four institutions central to delivering people-centred resilience are: secure land rights; dynamic farmer associations; responsive agricultural advisory services; and public support for environmental services.

Official development assistance (ODA) to agriculture has fallen by some 75 per cent over the past two decades, from a high of approximately \$20bn per year in the mid-1980s to \$4bn per year in recent years. Donors currently spend twice as much on emergency response efforts as they do on agriculture. However, preventing crop failure via proactive agricultural investment is estimated to cost about one-fifteenth as much per person as sending food aid to hungry people once farm production collapses. Farmers living on marginal lands have been largely neglected, as have sustainable agriculture strategies.

Vulnerable small-scale farmers are also affected by policy addressing both climate change mitigation and adaptation to climate change. The World Bank estimates that the cost of helping developing countries adapt to climate change will average between \$75bn and \$100bn per year for the period 2010–2050. In all, Oxfam calculates that at least \$150bn per year is needed to address critical adaptation and mitigation needs for developing countries.

Agro-ecological practices can simultaneously deliver food security, adaptation, and mitigation. However, such outcomes are not presently forthcoming from existing institutional mechanisms. For instance, only 14 per cent of the projects supported by the EU's €1bn commitment on food security projects for vulnerable farmers in 2009, included an agro-ecological component, while 51 per cent included agro-chemicals. Meanwhile, current funding for climate change adaptation in vulnerable communities is tiny. Major investments in vulnerable farmers are needed to reverse these trends and ensure that farmers have the tools to build their resilience and contribute to food security in the long-run despite growing climate shocks.

Given these challenges, Oxfam recommends that donor nations and developing-country governments:

- **Invest more and more wisely in agriculture to accomplish multiple goals.** New public investments in agriculture emphasizing agro-ecological approaches are essential to improving food security, helping vulnerable farmers adapt to climate change, and mitigating climate change.
- **Commit to providing \$150 bn in mitigation and adaptation funding across sectors** above and beyond the 0.7 per cent of their budgets that donor nations have committed (but not necessarily delivered on) as ODA.
- **Foster 'people-centred resilience' to help vulnerable small-scale farmers achieve food security and adapt to climate change.**
- **Capture the vast potential of developing-country agriculture to deliver mitigation.** Vulnerable farmers and pastoralists – including particularly vulnerable groups such as women – should be treated as key partners in the struggle against climate change.
- **Prioritise investments in small-scale farmers working on marginal and degraded lands.**
- **Scale up proven community-based measures.** Notably, foster agro-ecological practices.
- **Target public investments to fill the gaps left by the private sector.** Investments in food security and adaptation should emphasise marginal areas where investors find few profitable opportunities, yet where vulnerable farmers are concentrated.
- **Address institutional constraints facing female farmers.** Train extension agents to meet the specific needs of female farmers and recruit new female extension workers. Increase tenure security for women through low-cost, rapid, and transparent community land registration. Improve women's access to inputs, technologies and financial services.
- **Gather gender-based statistics,** given the importance of gender to understanding the critical dynamics of reducing food insecurity and adapting to climate change.
- **Harness the large overlaps between adaptation and mitigation measures within agriculture.**

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