

Climate Change Adaptation

Enabling people living in poverty to adapt

This paper seeks to bring together knowledge from Oxfam's work on livelihoods, natural resource management, and disaster risk reduction to show what can work for adaptation to various climate hazards. It further seeks to locate that approach within a vulnerability context, whereby differentiated vulnerability is analysed and acted upon, prioritising the needs of communities and individuals most vulnerable to climate change within national approaches to adaptation. Finally, it seeks to reorient national adaptation planning around the process by which international, national and sub-national provision can be utilised to *deliver adaptation that communities need, particularly those most vulnerable to climate change.*

Anthropogenic climate change is the greatest threat to development and is fast pushing communities, particularly the most poor and marginalised, beyond their capacity to respond to climate variability, changes and disasters. From areas where staple subsistence crops are approaching their outer viable temperature ranges; to erratic rainfall patterns and changing seasons upsetting agricultural cycles and leaving many producers insecure; to rising sea levels causing inundation of crops and contamination of water supplies with salt water; livelihoods, particularly rural livelihoods, are bearing the brunt of anthropogenic climate change.

There are three major challenges that climate change brings to bear on rural communities: undermined sustainability of current livelihood strategies; increased pressure on already depleted natural resource bases; and increased disaster risk from climate hazards. Effective adaptation must therefore bring together sustainable livelihoods, natural resource management, and disaster risk reduction approaches to secure and enhance assets within the analysis of climate change. To achieve this, a variety of measures will be needed for adaptation, ranging from those focused on addressing specific impacts to activities that reduce vulnerability and manage risk when the scale and direction of climatic changes are less certain.

There are no off-the-shelf, one-size-fits-all strategies for adaptation to climate change, as they must consider these many local factors. But there are many tools and techniques that if tailored correctly to the local context, we know can deliver benefits to communities. For example, in places where staple subsistence crops are approaching their outer viable temperature ranges, there is an urgent need to develop heat-tolerant crop varieties and to ensure effective water management to

combat the accompanying increase in evaporation. Where erratic rainfall and changing seasons are upsetting agricultural cycles, there is an urgent need for local weather and seasonal forecasting designed to meet local farmers' needs; rainwater harvesting methods that do not burden or put at risk women and children involved in water collection; agricultural techniques that support soil under water-stressed conditions; faster maturing crops; and tree planting in areas exposed to flash-flooding and soil erosion. Where sea-level rise is causing salt-water inundation of crops and clean water supplies, there is an urgent need to develop or select salt-tolerant crop varieties; invest in water management to protect drinking water; build or rehabilitate natural flood and storm-surge defences; and in some cases build sea walls or drainage systems.

To deliver at the local level, communities themselves are key to unlocking what is needed for adaptation. With limited meteorological information in many parts of the world, communities are the most aware of what changes are occurring and how this is impacting on their livelihoods. But what is lacking is an enabling environment whereby their observations and challenges are located within medium- and long-term trends in a changing climate, and the resources and services to respond to these changes. Location-specific knowledge, and therefore communities themselves, are key to understanding the vulnerability context that combines local climate observations; climate change trends; local livelihoods; interactions of poverty and the environment; existing inequalities; cultural norms; agricultural policies and practices; access to local services, etc.

The international community must deliver the resources and an enabling environment for national governments to orient adaptation towards the needs of those most vulnerable to the impacts of climate change. National planning processes must facilitate the adaptation that is required from the community-level upwards; for without locating the decision making processes for adaptation within its context-specific location, there is the risk of maladaptation; of reinforcing inequalities and not delivering for the most vulnerable individuals within communities; or of limited local buy-in, preventing successful implementation.

This is a significant challenge, with vulnerability being a product both of exposure and of adaptive capacity. Often this means that those communities and individuals most vulnerable will be those most marginalised and least supported by existing institutions at various levels. As such, it is hoped that by reorienting the concept of the national planning process around local delivery objectives, existing inequalities will not simply be reinforced and the most vulnerable will be identified and prioritised, as well as empowered to hold those responsible for these processes to account.

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