

to climate change case study:

# **CLIMATE RESILIENCY FIELD SCHOOLS** HELP FARMERS IN MINDANAO, PHILIPPINES, **PREPARE FOR AN UNCERTAIN FUTURE**

Esperanza, the Philippines: We have had to adapt our gardening techniques to deal with the changes in weather. For example, we can only water the plants at night because it's just too hot in the daytime," says Teodora Ayson. Photo: Tessa Bunney/OxfamGB.

# **CLIMATE CHANGE IN MINDANAO**

The Philippines is one of the most vulnerable countries in the world in relation to climate change impacts. The southern region of Mindanao — the least developed part of the country, which contains seven of the 10 poorest provinces - is particularly affected, with high exposure to extreme weather events, frequent droughts, floods and landslides.

Mindanao communities have also been hit by several strong typhoons in recent years, including Typhoon Bopha in 2012, which killed over 2,000 people and displaced close to a million.

## WHY IS OXFAM WORKING IN MINDANAO?

With climate-related challenges mounting in the region, communities in Mindanao were found to have low levels of understanding of climate change and its impact on their livelihoods.

Lack of access to reliable weather and climate information makes it harder for farmers to make the right decisions on planting times and crop types, affecting yields and food security. With little access to capital and mounting debt from purchasing seeds and fertiliser, farmers in the area are finding it difficult to cope with the increasingly erratic climate and heightened risks of crop failures.

Communities in Mindanao also face a range of other challenges, such as:

- ongoing conflict and political tensions;
- very low human development and poverty indices;
- low public investment in services and infrastructure; and
- frequent disasters.

Working to specifically increase climate resilience can help build resilience to these other challenges too.



"We have no option but to adapt. But the experience of Hinatuan will hopefully inspire other places to study the changes in our environment and find ways to adapt to them. We are also hoping that our experience will inspire others to also make efforts in healing our planet."

— Maria Liza Baid, Hinatuan, Surigao del Sur

#### WHAT ARE WE DOING ABOUT THESE PROBLEMS?

In response to these issues, Oxfam and local partners have developed the Building Resilient and Adaptive Communities and Institutions in Mindanao project, which is supported by the Australian aid program. The project runs in 18 municipalities across eight of the poorest provinces in the Central Mindanao and Caraga regions. It aims to improve community and local government capacity to plan and implement locally relevant adaptation actions, and increase understanding of — and action on — the links between climate change and people's ability to grow food and earn an income.

This project is helping close to 8,000 women and men strengthen their livelihoods in the face of climate change. It focuses on farmers' access to and use of climate information and projections to ensure that the approaches applied are both economically advantageous and environmentally sustainable as well as being resilient to future climate change impacts.

As part of the program, Oxfam and partners undertook participatory community vulnerability analysis with community members on regional climate change projections — what they may mean for the local community and how they differ from, or align with, traditional knowledge of the climate system — and existing community structures, strengths, and vulnerabilities. The results were used as the basis for developing local-level climate change plans and identifying adaptation actions, particularly focused on climate-smart livelihoods for women.

"I was becoming discouraged as we were spending so much money on farming inputs such as fertilisers and pesticides. [At] the field school ... I was totally amazed. I couldn't believe you could make fertiliser for free ... I can make fertiliser from my own household waste now."

— Gary Castanares, resident of Bagumbayan, Sultan Kudarat

# WHAT ARE WE LEARNING?

A key outcome of the analysis was a clear need for more effective adaptation solutions in the agriculture sector — the primary source of income generation in the region. To help rural farmers develop adaptive agriculture techniques (such as crop diversification, contour farming, organic farming techniques, developing seasonal calendars and recording climate observations), Oxfam and partners instituted a series of Climate Resiliency Field Schools (CrFS). The schools are working directly with local farmers across six municipalities in three provinces, providing information and training in climate-smart farming practices, and ensuring farmers have access to reliable climate and weather information on which to base planting decisions.

The CrFS, as a new approach to agriculture, started with small groups of women and men farmers (30–35 per site) attending weekly sessions during a season long (4–5 months) training program. The combination of theoretical understanding and practical application of skills in demonstration farms supported farmers to apply new techniques to their own plot.

## HOW HAVE THINGS CHANGED FOR THE BETTER?

CrFS have improved the way in which farmers, partners and local governments are preparing for climate change and its impacts on food security. The processes and techniques are also spreading, with Municipal Agriculture Offices adopting some of the CrSF models in their own farmer field school activities in areas outside of the project. Municipal Agricultural Technicians who have been trained through the project are facilitating CrFS sessions in program sites, increasing government ownership of the process and resilience for communities, and local government units have matched funding and deployed staff for training.

Oxfam is also working with Rice Watch Action Network to ensure the Department of Agriculture is aware of the CrFS process and its successes on the ground, and includes this method in extension programs. The project team is supporting farmers to increase their own peer learning exchanges.

