

SHARP: A participatory tool to assess climate resilience

The Self-evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists (SHARP) enables smallholder farmers and pastoralists to assess their own climate resilience. Developed by FAO in collaboration with external partners, it also provides key data to help scientists and policy-makers in their efforts to reduce the risks associated with climate change.

“Resilience” is at the heart of most discourses on agricultural development and is abundantly referenced through projects related to adaptation to climate change and agriculture. However, when pressed to describe resilience, experts give many different definitions and various criteria. Today, there are still very few tools to assess farmers’ resilience from the perspective of the farmers themselves.

Developing a resilience self-assessment tool

FAO and external partners decided to fill this gap by developing a self-assessment survey for farmers and pastoralists. In this exercise, resilience is defined as ‘the ability to survive, recover from, and even thrive in changing climatic conditions’ (ACCRN def-

inition, online). Each question in SHARP is linked to one or more resilience indicator, which can be used as a proxy for the level of climate change resilience of farmers and pastoralists.

The SHARP tool is implemented in three phases:

- A participatory self-assessment survey of smallholder farmers and pastoralists regarding their climate resilience.
- A double gap analysis and assessment of the responses : (i) at local level with the farmers and pastoralists in a rapid assessment and (ii) through a cross-sectional review of multiple assessments, including with local government officials and policy makers, to assess agricultural and pastoral policies regarding effectiveness and gaps.

- The use of all data collected, in conjunction with climate and scientific data, to inform and guide farmers’ practices, curricula, and local and national policies.

Following field testing in sub-Saharan Africa and expert discussions, a number of SHARP pilots have been launched as part of FAO GEF (Global Environment Facility) projects in Angola, Burkina Faso, Mali and Niger as well as in other projects in Burkina Faso, Senegal, South Sudan and Chad.

From resilience assessment to improved climate adaptation capacities

The self-assessment leads interviewees to consider their environmental, social, economic, governance and agricultural practices so as to obtain a holistic understanding of their climate resilience. The farmers and pastoralists answer questions that are tailored to their specific context; rank the adequacy of the component (e.g. access to markets or water quality) and then indicate the importance of that component for their livelihood.

SHARP goes beyond traditional extractive surveys by providing immediate offline results and encourages communities to learn from each other and plan activities for improvement. SHARP was developed to be applied in the context Farmer Field School programmes, before or during activities, but has since been used in other contexts.

All questions in the survey were screened to be gender-sensitive. Questions of access to resources were also included, which are especially important for female respondents. A few questions were integrated that specifically tackled the gender aspect of resilience and potential intra-household disparities, including questions on household decision-making, diet patterns within the household and education levels of different members. Results are gender-



Field training on the SHARP tool and data collection with tablets in Virei, Angola

disaggregated. The guidelines for SHARP implementation underscore the importance of including women in SHARP assessments and highlight facilitation processes for gender-sensitive questions.

Self-assessment, group discussions and the use of tablets

By carrying out the assessment with the tablets, farmers and pastoralists are able to determine their level of resilience in regard to resources and the validity of the results obtained. As such, the final set of priorities is well-adapted to the needs of the assessed community. By allowing targeted group discussions and information exchanges, carrying out the survey by itself contributes to reinforcing climate resilience.

The data collected through SHARP during the rapid assessment will help the farmers, pastoralists, and project staff to adapt field school curricula/project focus to each unique situation. This is one of the major benefits of the approach: to integrate the tool within participatory and community-driven programmes, such as farmer field schools (which are increasingly recognized as a best practice for building farmer capacities), to ensure that locally-crafted strategies will be created to increase productivity and resilience.

After the first two phases, the data can be used to highlight the strengths and weaknesses of programmes in different countries to improve smallholders' resilience. This information can then be combined with climate models (where available) and be used by policy makers to develop effective policies and programmes.

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Woman consults data on a tablet



EX-ACT: Estimate and Target Climate Change Mitigation in Agriculture

The Ex-Ante Carbon-balance Tool (EX-ACT) is an appraisal system developed by FAO to provide ex-ante estimates of the impact of agriculture and forestry development projects, programmes and policies on the carbon-balance. The carbon-balance is defined as the net balance from all greenhouse gases (GHGs) expressed in CO₂ equivalent that were emitted or sequestered due to project implementation as compared to a business-as-usual scenario.

EX-ACT has become an important reference tool in terms of carbon accounting for projects, widely recognized in the framework of estimation of GHG emissions for Sustainable Land Management and Forestry. The tool helps project designers estimate and prioritize project activities with high benefits in economic and climate change mitigation terms. The amount of GHG mitigation may also be used as part of economic analyses and for the application of additional project funds.

- EX-ACT as reference methodology for The World Bank and GEF AFOLU (Agriculture, Forestry and Other Land Use) projects. This is an important step towards making climate change mitigation part of agricultural investment planning by international institutions.
- EX-ACT was identified as one of the valid tools for project GHG accounting of Global Environmental Facility (GEF) projects.
- The EX-ACT team collaborated with CGIAR - a global agriculture research partnership for a food-secure future - in an analysis of IFAD projects (International Fund for Agriculture Development).
- In the scope of the Sahel and West Africa Program (SAWAP), the EX-ACT team is engaged in capacity building with the SAWAP projects in the application of the EX-ACT tool.

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In the last months, the EX-ACT team has collaborated with the following partners in project appraisals all over the world: