



RESEARCH PROGRAM ON  
Climate Change,  
Agriculture and  
Food Security



# CLIMATE SERVICES FOR SMALLHOLDER FARMERS IN AFRICA: A FIELD MANUAL

Walker Institute research

Walker Institute researchers working with CCAFS have developed a field manual for their new sustainable approach to help smallholder farmers deal with climate variability and risks. The manual provides a step-by-step guide, for extension and NGO staff, to the Participatory Integrated Climate Services for Agriculture (PICSA) approach.

## A NEW APPROACH TO CLIMATE SERVICES FOR SMALLHOLDER FARMERS

Smallholder farmers are key to food security in sub-Saharan Africa where two thirds of the population depend on small-scale, rain-fed farming as their main source of food and income. Critical farming and household decisions depend upon factors such as, how much rain falls, the length and start date of the rainfall season and the timing of dry spells. These vary considerably from year to year.

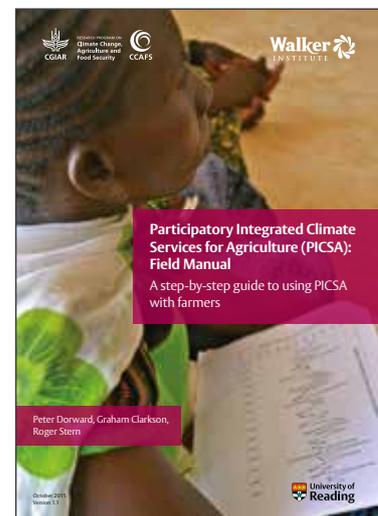
The PICSA approach couples local climate, crop, livestock and livelihood information with participatory planning tools that farmers can use to decide the best farming and livelihood options for them. PICSA makes extensive use of historical climate information provided by national Meteorological Services to facilitate farmers to explore risks and opportunities.

## PICSA FIELD MANUAL FOR EXTENSION WORKERS, FIELD STAFF AND NGOS

The PICSA manual has been designed to support field staff in their work with farmers in the lead up to and during agricultural seasons. Emphasis is placed on supporting farmers, with information and tools, to make decisions that best suit their individual contexts and objectives (options by context).

PICSA is already being used successfully in a number of countries across sub-Saharan Africa in partnership with organisations including the World Food Programme (WFP) and CCAFS.

PICSA has been developed in collaboration with the **CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)**. Development of the approach has also been funded by: Nuffield Africa and the **Rockefeller Foundation**.



Download the field manual:

[www.walker-institute.ac.uk/research/PICSA](http://www.walker-institute.ac.uk/research/PICSA)

'The PICSA approach focuses on practical, hands-on methods that can easily be picked up and used by farmers.'

**Dr Peter Dorward**

Walker Institute and School of Agriculture, Policy and Development



## THE KEY STEPS WITHIN THE PICSA APPROACH

In the manual the PICSA approach is broken down into participatory activities that field staff facilitate with groups of farmers through a series of meetings. The key steps within PICSA are as follows:

### Long before the rainy season:

- Understand what farmers do currently
- Analyse historical data to identify climate risks
- Consider options for farmers in their location
- Farmer decides best option/s to try for her/him

### Just before rainy season:

- Assess seasonal weather forecast
- Consider responses
- Reshape options/decisions

### During the rainy season:

- Assess short term weather forecast
- Consider responses

### After the rainy season:

- Review season and PICSA approach



Resource allocation maps are one of the participatory planning tools used within PICSA. They allow farmers to consider the main livelihood activities of their household.

## PICSA BEING USED IN PRACTICE

The Walker Institute team is working with National Meteorological Agencies, government extension services and NGOs in several countries including Tanzania, Malawi, Kenya, Ghana, Lesotho and Mali to put PICSA into practice and to support the scaling up of climate services to thousands of farmers in a sustainable manner.

You can find examples of the use of PICSA here: <http://ccafs.cgiar.org/PICSA>

## WHAT TO DO NEXT

If you are interested in finding out more about PICSA then please use the links provided in the 'Find out more' section. For more detail you can also contact the PICSA team who's contact details are given here.

### Find out more

Download the field manual here:  
[www.walker-institute.ac.uk/research/PICSA](http://www.walker-institute.ac.uk/research/PICSA)

See further information:  
[www.walker-institute.ac.uk/research/PICSA](http://www.walker-institute.ac.uk/research/PICSA)  
<http://ccafs.cgiar.org/PICSA>

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