

Smallholder Resilience to Climate Change



Margarita Astrálaga, Director IFAD Environment & Climate Division

AGRICULTURE and CLIMATE CHANGE

- **Agriculture is part of the problem AND part of the solution**
- **500 million smallholder farms produce up to 80% of food in developing countries**
- **Agriculture, forestry and other land use – 25% of global greenhouse gas emissions**



CLIMATE CHANGE and RESILIENCE

- **The capacity of a person or household to deal with change, withstand and recover from disturbances from weather-related events**
- **The capacity to avoid poverty in the face of climate-induced shocks and stresses**



VIDEO

Burkina Faso – Waiting for the Rain



ADAPTATION FOR SMALLHOLDER AGRICULTURE PROGRAMME (ASAP)

- **Worldwide largest climate change adaptation programme for smallholder farmers**
- **Most concrete and visible flagship programme on agriculture adaptation**
- **Integrates climate resilience actions into IFAD investment programmes**
- **Centrepiece of a change management process**

ASAP in a nutshell

- Operational since September 2012
- US\$ 366 million from 10 bilateral donors
- Integrates adaptation actions into IFAD investments (28 out of 43 ASAP grants approved)
- 1 US\$ of ASAP financing supports climate resilience of up to 6 US\$ from IFAD & other sources
- UNFCCC Momentum for Change Award (2013)

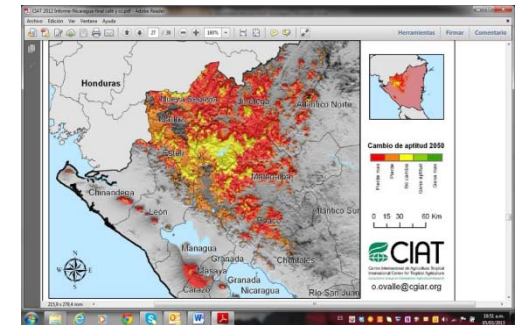


Examples from IFAD's Adaptation for Smallholder Agriculture Programme

Gernot Laganda, Lead Technical Specialist

How do ASAP investments help smallholder farmers increase their resilience?

1) By **analyzing** new and emerging risks



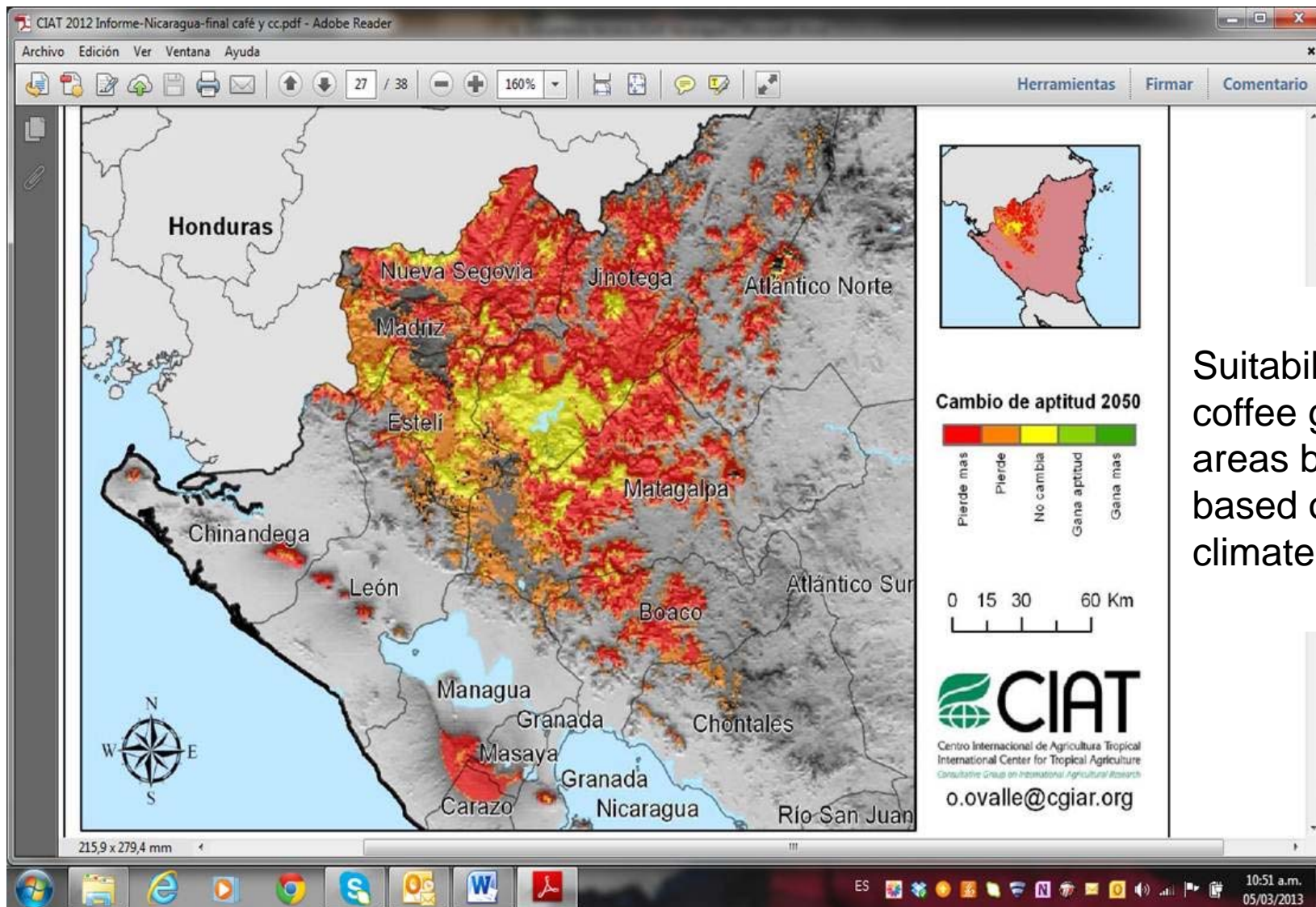
2) By providing **access to technology**, information and financing for climate risk management



3) By building **scale mechanisms** and pathways for sustainable landscape management



Example Nicaragua: Analyzing climate change impacts on coffee



Suitability of coffee growing areas by 2050, based on climate models

Example Nicaragua (cont.): Prioritizing investments in adaptation & resilience

- **Coffee agroforestry**
- **Intercropping (banana/cocoa)**
- **Access to weather information and disease monitoring**
- **Improved water storage**



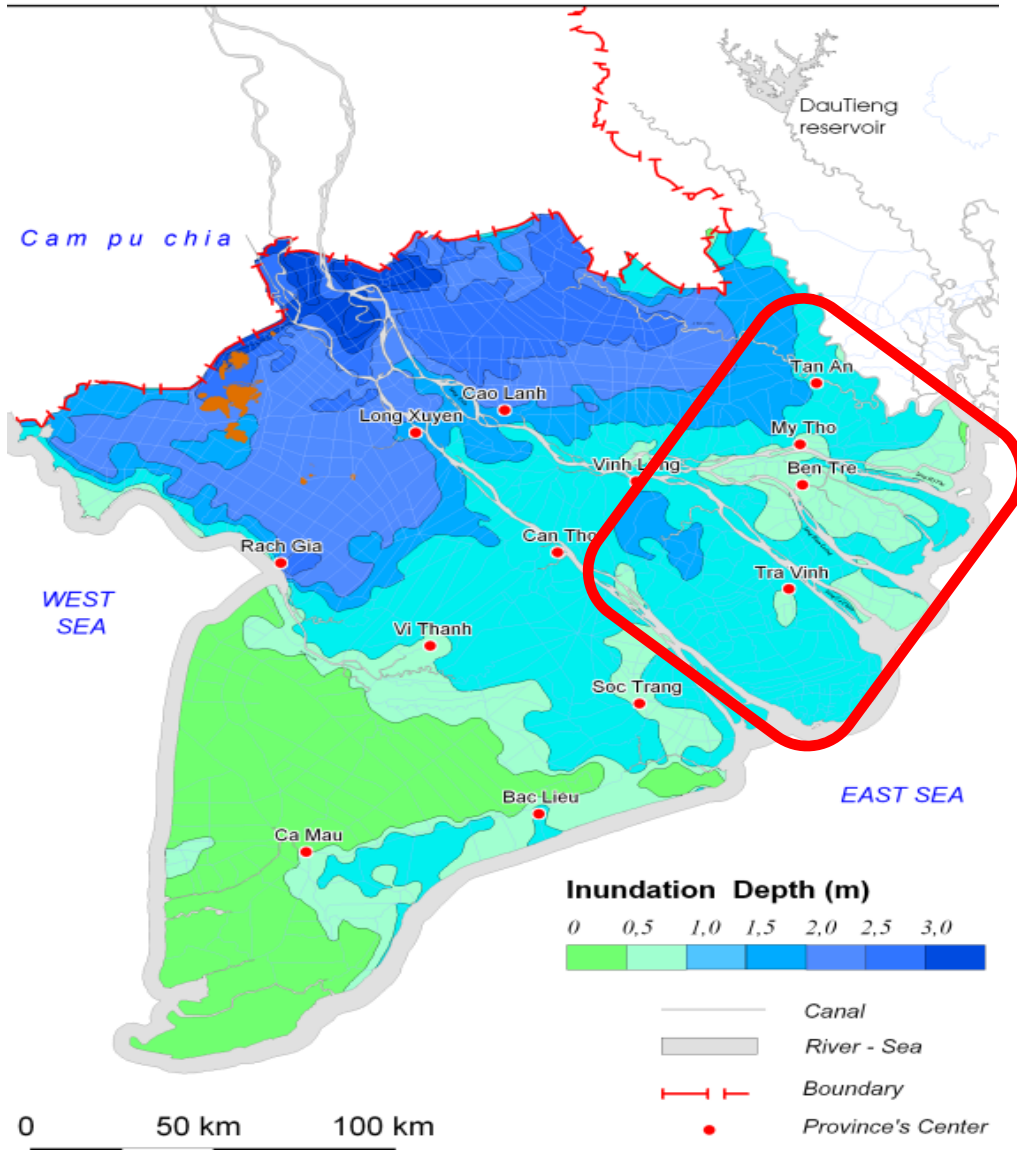
Example Nicaragua (cont.): Building pathways and mechanisms for scale

- **Policy engagement on long-term strategies for coffee & cocoa in Nicaragua**
- **Training of cooperatives on sustainable management of landscapes**



Example Viet Nam: Analyzing climate change impacts on rice farming

CASE: SEA LEVEL INCREASES 0.30 M - CURRENT CONDITION



Mekong River Delta Sea level rise projections:

- 17 cm by 2030
- 30 cm by 2050
- Rice growing area: minus 13%



Example Viet Nam (cont.):

Prioritizing investments in adaptation & resilience

- **Salinity monitoring**
- **Salinity-resistant catfish breeding**
- **Community-based crop trials**
- **Diversification of income streams**



Example Viet Nam (cont.): Building pathways and mechanisms for scale

- Evidence-based allocation of provincial budgets
- Integrative knowledge management system, combining community and academic research
- Policy-relevant impact assessments



ASAP at scale – which difference are we making?

Indicator of success	Programmed to date (after 28 ASAP investments)	Final target (after 43 ASAP investments)
Smallholder farmers with increased resilience	5.6 million	8 million
Hectares managed under climate resilient practices	1.5 million	1 million
Households, production and processing facilities with increased water availability	99,000 households (plus 2560 facilities)	100,000 households
US\$ value of rural infrastructure protected	US\$ 54 million (+ 625 km of roads)	US\$ 80 million
International and country dialogues on climate issues	49 dialogues	40 dialogues



The case of Mali

Project scope and objectives

Mali

Adaptation de la petite agriculture paysanne aux changements climatiques

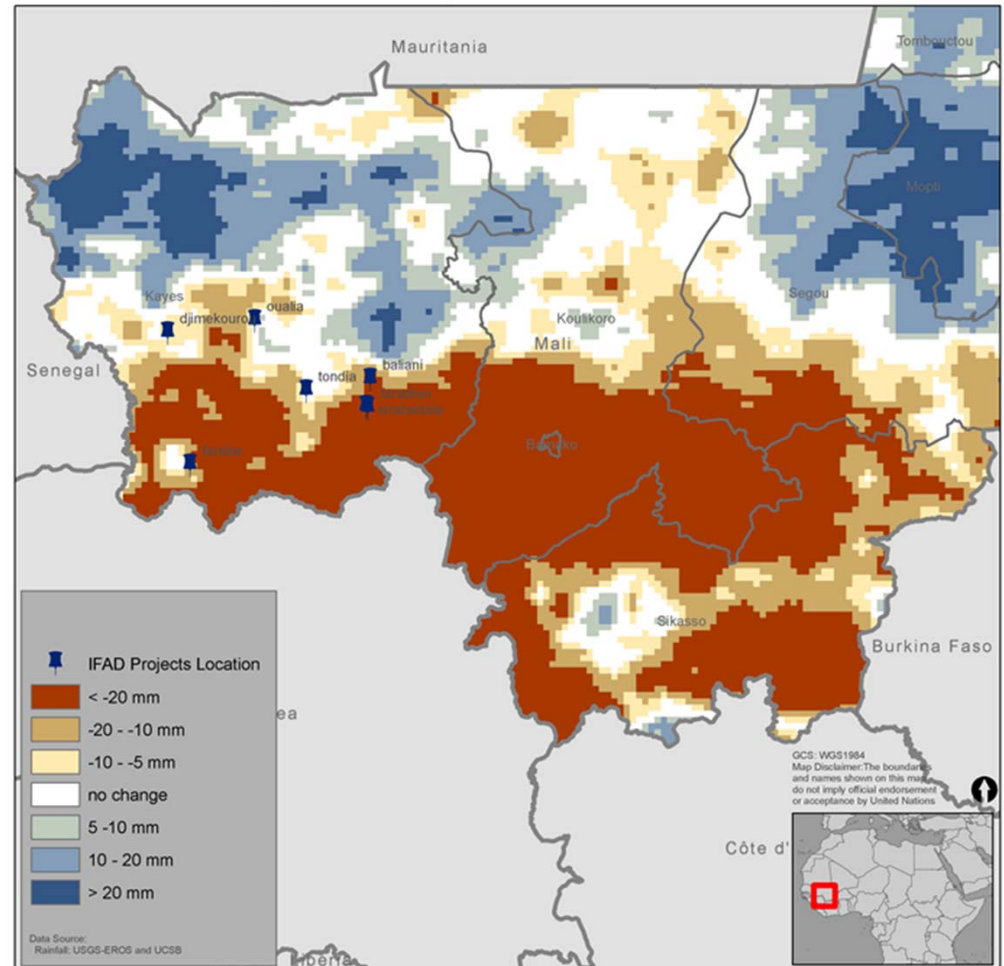


- **Project:** Fostering Agricultural Productivity in Mali (PAPAM)
- **IFAD investment:** US\$ 32 mill
- **ASAP co-financing:** US\$ 10 mill
- **Objective:** To increase the resilience of smallholder farmers in the Kayes and Sikasso regions

Project area and vulnerability to climate change

- Reduced and unpredictable rainfall
- Increase in temperature
- Increase in magnitude and frequency of extreme weather events

MALI - RAINFALL TRENDS (1994-2013) - mm by decade



Rainfall trends (1994-2013) in mm per decade

Component 1: Technology transfer

Biogas technology:

Phase I:

100 fixed domes and 45 flexible



Phase II:

Scaling up within a national strategy



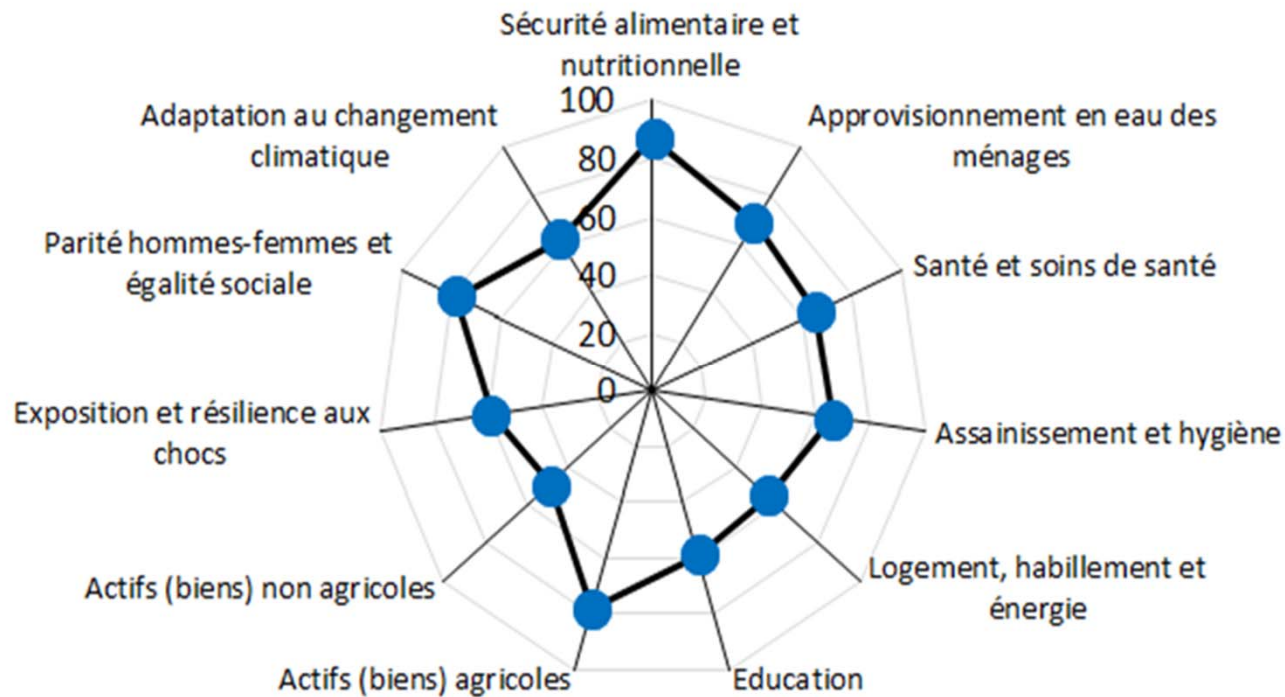
Component 2: Community-based adaptation

- Participatory planning
- Implementation of local adaptation plans
- Better access to weather information



Component 3: Programmatic approach and sectorial monitoring

- Support to participatory policy dialogue
- Innovative Multidimensional Poverty Assessment Tool



Climate Resilience in IFAD: LOOKING AHEAD

- **ASAP phase 2 – broadening from grants to loans**
- **Accreditation to the Green Climate Fund**
- **High level policy engagement in UNFCCC COP21**
- **Securing additional funding from the Global Environment Facility (GEF)**
- **Social, Environmental and Climate Assessment Procedures (SECAP) fully rolled out**
- **Environment & climate change 100% mainstreamed by 2018**



THANK YOU!

