

## ASAP Innovations, Policy and Scaling

### RWANDA

- Through ASAP's grant for PASP, interventions contributed to reducing food and milk losses at post-harvest, increment in production yields by quantity and quality, and improved food security of households involved in the project.
- The project's influence extended beyond the community level and reached the policy realm. Notably, smallholder farmers and district leaders now recognize and prioritize the significance of post-harvest investments, resulting in greater attention to these matters in district plans and agendas.

#### The challenge:

#### Drought compounds post-harvest losses and the resilience of communities

Post-harvest losses are recognized in Rwanda as one of the greatest sources of inefficiency in agricultural production, estimated at about 30% of harvested products further compounded by the heavy reliance on rainfed agriculture and vulnerability to climate change.

Kayonza, Gatsibo, Kirehe, and Nyagatare districts in the Eastern Province of Rwanda have a high susceptibility to severe drought. To illustrate that, in the period between September 2015 and June 2016 when extreme drought was reported in Rwanda, the drought affected at least 47,300 households.

To counter the impacts in these communities, the Climate-Resilient Post-Harvest and Agribusiness Support Project (PASP), through ASAP's grant, aimed at contributing to Rwanda's climate change adaptation.



#### Climate-Resilient Post-Harvest and Agribusiness Support Project (PASP)

2013 - 2020

#### Project Financing

Total project cost: US\$ 83.35 million

IFAD financing: US\$ 33.86 million

ASAP grant: US\$ 6.9 million

#### Outreach

- 70,420 households or 303,932 individuals directly reached
- 12 districts of Rwanda: Rubavu, Nyabihu, Ngoma, Muhanga, Kamonyi, Nyanza, Ruhango, Kirehe, Kayonza, Gatsibo, Nyagatare

#### Target group

- Poor smallholder farmers engaged in the production and primary processing in the priority value chains (maize, beans, cassava, Irish potatoes, horticulture and dairy)

#### Project objective

Increase incomes, enhance food security and reduce vulnerability for smallholder farmers, particularly women and young people.

## The innovation: The Participatory Integrated Climate Services for Agriculture (PICSA) and the provision of climate information services

In Rwanda, ASAP pioneered the Participatory Integrated Climate Services for Agriculture (PICSA) - a model developed by the University of Reading which combines weather data with traditional farmer knowledge to enhance farmers' decision-making.

Through this approach, farmers were taught to read and interpret past years' climate information and predict the weather and rain availability in their respective districts to use it in planning their agricultural season and other livelihood activities thus improving their adaptive capacity to climate change.

Local smallholder farmers reported that knowing whether there would be long or short rains in the season allowed them to choose the appropriate variety of maize and plan other inputs and management activities. Given the knowledge acquired on climate risk management, smallholder farmers continue to utilize weather and climate information.

In addition, through the partnership with the Rwanda Meteorology Agency, the project supported the dissemination of different types of climate information including early warning phone messages, on a daily, weekly, monthly basis and seasonal forecasts. These instruments were very successful because they were built on the tailored needs of farmers.



### Story from the field

Grace Mukamana, like many farmers in the eastern province of Rwanda, had been struggling to grow her maize, beans and coffee because of persistent drought and a shortage of rainfall. Through PASP, she receives climate change risk management training and timely weather information via an SMS text on her cell phone.

The daily weather information and training help Grace choose the right seeds, plan ahead for her agricultural activities and benefit from her investment in crop insurance when drought strikes.

This support has helped Grace nearly double her yields, feed her family and send her four children to school.



## Results and impacts

The project strengthened the resilience of most local communities to climate-related shocks and stresses. By employing the innovative PICSA approach, the project successfully garnered widespread adoption of climate risk management and adaptation training among community members.

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The project's influence extended beyond the community level and reached the policy realm. Notably, smallholder farmers and district leaders now recognize and prioritize the significance of post-harvest investments, resulting in greater attention to these matters in district plans and agendas.

It was further noticed that PASP had significantly influenced policy at the national level. The PICSA approach, originally implemented by the project, has been adopted by Rwanda Met Services and successfully expanded to Mozambique and Malawi, showcasing its scalability and effectiveness.

Overall, the project's enduring benefits are expected to persist due to the ownership demonstrated by project participants and the support and commitment from the government.

## PASP Footprint



**26.1% increase in net income for project participants**



**75.6% of project households** reported an improvement in food availability and eating habits.



**83% of project participants** acquired the capacity to implement climate risk management strategies against the target of 80%



**High adoption rates:** Using PICSA approach, the project trained farmers on climate risk management and adaptation and the **adoption levels for these trainings were 85%.**

Post-harvest losses had reduced significantly for the targeted crop and dairy value chains:



Irish Potato value chain losses reduced **from 33% to 10.3%**



Cassava food losses reduced **from 34.58% to 12.9%**



Dairy post-harvest losses were reduced **from 18% to 3.5%.**






Adaptation for  
Smallholder  
Agriculture  
Programme

**ASAP**



Investing in rural people

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