



TICmbay: ICT-enabled agricultural extension in Senegal

Our objective:

To improve food security and reduce poverty among smallholder farmers in Senegal through impact on improved agricultural productivity in selected food crops by :

- Improving the capacity of smallholder farmers to use quality seeds and improved technologies correctly through the use of ICT enabled services
- Providing financially sustainable ICT enabled services to complement other extension services using a mix of ICT media

OUR 4 YEARS ACHIEVEMENTS

The challenge

In Senegal, nearly 50% of the population is employed in the agricultural sector, many on small family run farms. Use of improved inputs has historically been limited among these small scale farmers, and few farmers report regularly engaging with traditional extension services.

However, access to information and communication technologies (ICTs) is very high even in rural areas, with 76% of the total population that own at least one mobile phone and 83% listen to radio.

This makes Senegal fertile ground for leveraging ICT-enabled agricultural extension services to reach its large population of rural smallholders.

How do we address that

TICmbay (combining “ICT” in French and “farming” in Wolof) is a four-year initiative (2015-2019) which is **leveraging the power of local radio and mobile phones to promote uptake of improved climate-smart agricultural technologies and practices** and to provide financially viable ICT-enabled services to complement existing agriculture extension.

TICmbay helped **transform small scale farming in Senegal by demonstrating the potential of ICT services in achieving food security and broader development goals** under a changing climate and increasing food demand.

By adopting drought-resistant and shorter-cycle crops varieties and improving soil management practices, smallholders are benefiting from the **"win-win" of harvesting higher yields while improving their resilience to climate shocks through protecting them against the risk of crop failure that they were previously exposed to.**



Our approach


TICmbay leveraged trusted voices in local languages in order to deliver credible, accessible messages to hard-to-reach, last mile, farming households. Radio and IVR-based phone services sat at the centre of a suite of tools designed to equitably reach women and illiterate farmers in resource-poor communities.

Local radio stations broadcast programs featuring local leaders and farmers discussing their experiences with the promoted agricultural technologies. Listeners were invited to call into an automated IVR system (YouTalk) to leave messages and record questions which local partners would then respond to on- or off-air. Callers' numbers were captured so that partners could later leverage related ICT-enabled outreach services, including push-IVR messaging (mAlerts) and phone-based surveys.

TICmbay has also succeeded in securing financially viable ICT services to over 800,000 rural men and women in 12 regions of Senegal. This was achieved through the incorporation of a social enterprise, Jokalante, which continues to provide ICT services to clients seeking to dialogue with hard-to-reach communities. Over the past 4 years, Jokalante has worked with agro-business enterprises to build an innovative marketing approach for their products through the use of adapted and demand-driven ICT services.

Our Good numbers

 **100**
Community radios
mobilized through
partnership with the national
radio union

 **12**
Regions of Senegal
targeted for SSTP technologies
or management practices
dissemination activities

 **800,000**
Smallholder farmers
reached as potential audience
of radio shows across
Senegal

 **38,000**
M-Alert voice messages
received by farmers with
specific information for uptake
of improved technologies and
best practices

 **31,000**
Smallholders have adopted
one or more of the promoted
technologies: certified seeds, seed
treatment and , organic fertilizers

 **11,900**
Hectares
under improved agricultural
technologies or management
practices

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