

ICT HELPING SCIENTISTS ENGAGE INNOVATION CITIZENS IN SOUTHERN NIGERIA: A CASE OF ICT REINFORCED MAIZE INNOVATION CLUSTER IN AGO-ARE, OYO STATE OF NIGERIA

The Problem

Difficulty experienced by researchers in engaging citizens along the commodity chain is one major reason for low productivity in African agriculture. To rectify this, and thereby increase the speed and quantum of impact of ARD, the innovation systems approach has been proposed. Innovation systems approach calls for

research to widen its partnerships beyond the farmers and to include other non-traditional partners along the commodity chain. It is normally a big challenge for researchers to reach out and benefit from the innovative capacity of the available farming groups at the grassroots; but ICT could help.

The Project



Ago Are Multi-purpose Center

A multi-purpose community-based information access point using ICT was employed in 2005, to ensure that research effectively engaged the citizens required for innovation in agriculture. The access point was based in Ago-Are to directly strengthen five

maize-based innovation clusters and ensure that scientists located at about 200 kilometers away engage the community members in the innovation process. It also indirectly strengthened 2 innovation clusters located in more remotely based Tede community. Farmers in the Tede clusters communicated with the access point using mobile telephone aided by a contact person who shuttles on a motorcycle. The innovation clusters included all relevant partners along the commodity chain working with researchers from the International Institute of Tropical

Agriculture, and Bowen University in Nigeria. In all a total of 7,500 farmers were networked.

ICT Connection

ICT facilities, including internet connection were provided at the information access point within the community to bridge the gap between scientists located in the cities and the community members. It cost-effectively complemented the physical engagement made by scientists working with the maize clusters. ICT was used to train and link farmers with technologies, market prices, inputs and output

markets. ICT was further used by scientists to provide real time solutions to farmers' problems through the research station-based help desk and the community-based support desk.



Farmers and community members at the center

Results

Three years after the project commenced, and through participatory varietal selection and crop management research, yield of maize more than doubled to become 2.46 tons per hectare, the income of farmers increased from an average of \$1,623 per year to \$2,572 per year, use of external inputs and farm size rose by 300 %, and 70% respectively. All these were possible because citizens were able to innovate and farmers derived benefits from the

Table 1. Farmers Output indicators

Variables	Mean before Project	Mean 3 years after	T-value	Pr> t
Yield (t/ha)	1.05	2.46	13.8	<.0001
Income per annum	1,623	2,572	15.51	<.0001
Input Use (as percentage of requirement)	22	64	12.27	<.0001
Farm Size per farmer	2.22	3.76	16.77	<.0001

respectively. All these were possible because citizens were able to innovate and farmers derived benefits from the

facilities installed and took ownership of the process. center was sustained through voluntary contributions made by farmers from their extra profit. This sum, which was the main source of sustainability for the centre increased as the number of farmers networked by the center increased. Additional resources that



Contact Change Agent

came from side operation as a commercial cyber café was not very significant and became irrelevant as the number of farmers grew above 5,000.

Conclusion

Rural communities where most producers live have to be mobilized for innovation to take place at the right rate and desired quantum. This is a challenge for researchers to accomplish but ICT could help. The internet holds great promises to expand the reach of scientists but it has to be sustained. One method of sustaining it is to

build it into the economic life of the rural people and make them really see the benefits there-from. They are thus encouraged to pay for it from their extra profit. Internet itself has to be complemented by rural phones to reach farmers at the last mile.

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