

Competitive African Rice Initiative (CARI)

We aim at improving the livelihoods of smallholder rice farmers and sustainably integrating them into the rice value chain. Implemented by the Gesellschaft für internationale Zusammenarbeit (GIZ) and its local partners, we support increasing the quality and quantity of smallholders' rice output as well as strengthening the capacity and efficiency of local processors. We work in four African countries: Nigeria, Burkina Faso, Ghana and Tanzania

Through a Memorandum of Understanding (MoU) signed between Africa Rice Center (AfricaRice) and CARI, smallholder farmers have benefitted from the ICT solution RiceAdvice. With the support of extension agents or service providers (SPs), farmers can receive tailor-made recommendations on nutrient management for rice production.

About RiceAdvice

AfricaRice is a pan-African research organization, has developed an Android-based decision support tool "RiceAdvice" for smallholder rice farmers, facilitating pre-season field-specific management guidelines for rice production. The RiceAdvice application helps farmers identify the best combination of fertilizers to buy, based on nutrient requirement and fertilizer prices, and helps farmers make better-informed decisions through specifically trained extension agents (EAs) or service providers (SPs). The app is downloadable at no cost.

After validation trials in Nigeria, Ghana and Burkina Faso, the RiceAdvice was disseminated to farmers in the CARI implementation areas with regard to agro-ecology, precipitation as well as rice/seed varieties used by farmers.



About Weed Manager

Another innovative application developed by AfricaRice is the WeedManager. The application assists EAs or SPs in generating farm-specific advice for weed management to smallholder rice farmers. The WeedManager reduces reliance on hand weeding, thereby contributing to sustainable and affordable productivity enhancement.

A pilot for the dissemination of the WeedManager involving 22 SPs and 220 CARI farmers has been conducted with two partners in Nigeria in 2017. Since then, an additional 61 SPs were trained, covering four States and 6 CARI partners in Nigeria. Similarly, a workshop to train 13 SPs from various locations in Tanzania was conducted.



What it takes to provide RiceAdvice

There are promising opportunities for stakeholders in the rice value chain to take up RiceAdvice. Youths and women who are trained as SPs can provide these services for a reasonable fee to rice farmers.

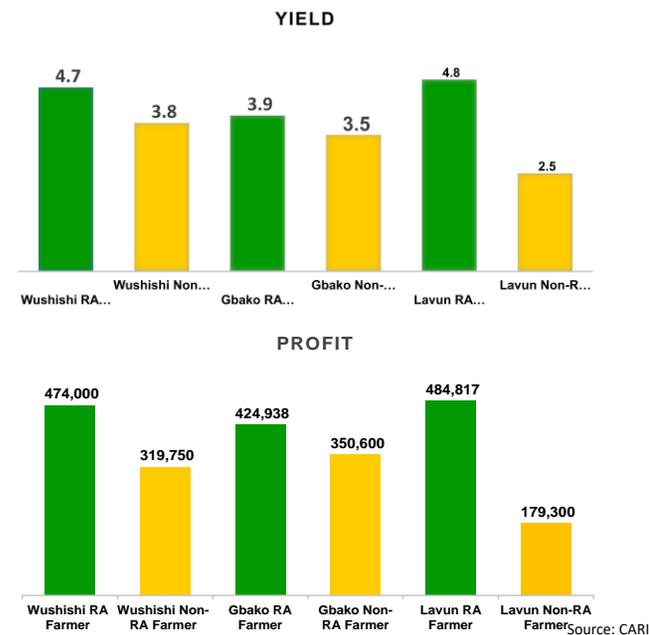
Using RiceAdvice is easy and quick to learn:

1. Get an Android device, download RiceAdvice and install
2. Service providers can learn to use RiceAdvice from the website: <https://www.riceadvice.info/en/riceadvice/> or get face-to-face training
3. Trained service providers can reach at least **100** farmers per season

Profitability of using RiceAdvice

A field trial was conducted to examine the difference in rice yield and profitability between RiceAdvice farmers and non-RiceAdvice farmers to quantify benefit from guidelines generated by RiceAdvice in Wushishi, Gbako and Lavun LGA's in Niger state, Nigeria.

The results of the analysis show a significant increase in the yield and profit for RiceAdvice farmers (RA) as compared to the non-RiceAdvice farmers (Non-RA). From the profit graph below, it is also evident that RiceAdvice farmers could pay a substantial amount for the guidelines that farmers received from SPs. These results are in line with studies conducted and published by AfricaRice.



Scaling up RiceAdvice Service

RiceAdvice extension and advisory services (EAS) play a very important role in scaling up Climate Smart Agriculture (CSA). Over time, the public budget for extension services has decreased in many developing countries including Nigeria, which has led to more involvement of private-led investment in agriculture (contract farming schemes). The question remains, how can RiceAdvice EAS become a sustainable solution to support the development of extension service in the rice sector.

Together with AfricaRice, we have developed 3 proposed business models to help commercialize the technology considering the traditional mode of process, including a description of the various business actors (aggregators/millers, SPs and rice farmers), their roles and cost for the service which will be a source of revenue. The 3 models are currently being piloted.

The objective is to test the different business models based on key factors (payment method and service price) to find out the suitable business model that can ensure commercially viable adoption of RiceAdvice over time. In these models, SPs will be employed by the aggregators/millers leveraging on the existing contract farming relationship with farmers and to building long term relationship for their business.

From the test, motivated youth can therefore build a business in which a youth SP will be independent to run his/her own business.

Proposed Business Models

The framework behind the proposed business models is based on the existing contract farming relationship between millers and farmers. Also considering the facts that farmers are not used to paying for agricultural extension services and face liquidity constraints in the middle of the production season when there is a demand for RiceAdvice EAS.

Business Model	Business Model	Business Model
1	2	3
Contract farming with miller + private digitized extension service with the option to pay at harvest	Contract farming with miller + private digitized extension service with the option to include cost of the service in the price of the rice	Contract farming with miller + private digitized extension service with the option of cash payment

Service Price



For a **1/4 hectare** farmers can pay between **1000 NGN – 2000 NGN** per season

If you are willing to test RiceAdvice by yourself or with farmers, please contact AfricaRice

(email to Mr. Kokou Ahouanton, K.Ahouanton@cgiar.org)

For more information visit:

<https://www.riceadvice.info/en/riceadvice/>



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GIZ is responsible for the content of this publication



COMPETITIVE AFRICAN RICE INITIATIVE (CARI)

RICEADVICE MOBILE APP



Advice on field-specific rice management practices:

Recommendations on fertilizer management, general good agricultural practices and provision of a specific cropping calendar.



AfricaRice

Interesting Facts every Rice Farmer should know!