

fertilizer to buy, based on nutrient requirement and fertilizer prices. Moreover, RiceAdvice helps farmers make better-informed decisions based on return-on-investment calculations. They can select their own target yield according to their budget. RiceAdvice does not need an Internet connection to generate the guidelines in villages or fields, except for updating the app.

Where farmers do not have smartphone or tablets, service providers (e.g. public extension service, private service providers) are needed. After farmers receive guidelines, they need to follow the guideline to achieve their specific goals. Also, to have larger impact of use of RiceAdvice, farmers need to follow good land preparation and crop management practices.

#### **Cost-benefit analysis**

Following guidelines generated by RiceAdvice, farmers can increase profit by US\$100-200/ha/season.

#### **Recommendations**

Irrigated lowland and favorable rainfed lowland where the risk of drought and flooding is small. Also, access to fertilizers is important.

#### **List value chains suited for the technology application**

Rice value chain actors, including farmers, extension workers, service providers, traders, input dealers and development agencies can use this app.



## AfricaRice

AfricaRice is a CGIAR Research Center – part of a global research partnership for a food-secure future. It is also an intergovernmental association of African member countries.

For more information visit: [www.AfricaRice.org](http://www.AfricaRice.org)



## AfricaRice

Technologies for African Agricultural Transformation



### Brief description

Free Android-based decision-support tool for providing farmers with guideline on field-specific crop management practices for rice to improve rice productivity and increase profitability.

### Developed by

Africa Rice Center (AfricaRice) and its partners

### Location where the technology was proven

This tool has been disseminated in Burkina Faso, Ghana, Mali, Nigeria, and Senegal.

### Number of partners involved in technology

introduction/promotion  
In 2016/2017, RiceAdvice reached over 19,000 rice farmers in Mali and Nigeria. Over 40,000 advices were generated and shared with farmers until early 2018.

### Results at the test sites

Main beneficiaries are farmers. RiceAdvice can increase rice yield

by around 0.5 to 1 t/ha and profitability by US\$100-200/ha/season. Other beneficiaries are service providers, who give guidelines generated from RiceAdvice, and can be paid for their service by farmers. RiceAdvice is user-friendly for both men and women, particularly the youth.

### Success factors

Expected users are farmers, extension workers, input dealers, traders, agricultural entrepreneurs, and development agencies in Africa interested in receiving expert advice for rice production. To generate the guideline, farmers should answer questions in RiceAdvice regarding their rice-growing environment, crop management practices, current yield level, etc. This interview takes about 5-10 min. The tool then provides the farmers with a plot-based fertilizer application plan (type, dosage, and timing) along with a cropping calendar and an estimate of expected income from fertilizer use. It helps farmers identify the best option for