

# **Factors Affecting Farmer's Decision to Adopt NERICA Rice Technology in Guinea**

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## **1. Introduction**

Rice has always been important staple food in many part of Africa and especially in Guinea. Despite its important in the national food security preservation and poverty reduction, the local production is largely insufficient to meet the consumption demand. One way to enhance this low productivity is through the adoption of improved rice varieties (the New Rice for Africa: NERICA). However, the adoption rate of NERICA among farmers in Guinea is relatively low. This paper examines the factors that influence farmer's decision to adopt the high yield NERICA rice varieties in Guinea.

## **2. Data**

The data was collected between March and April 2014 in two main rice growing villages in the Upper region of the prefecture of Faranah. A questionnaire was administered to 60 sample farmers from two villages. We collected information on farms characteristics (e.g., rice varieties and farm size), farmer's characteristics (e.g., age, education and gender), and access to credit and various agricultural services and facilities (e.g. threshing machine and store house). The binary logit model was used for examining factors that influence farmer's decisions to adopt NERICA technology.

## **3. Results and Discussion**

As a result of comparing two surveyed villages, the adoption rate in the village Dantilia where the project had distributed seed and agricultural materials was much higher almost a double of the village Magna. This difference was explained earlier as the project intervention that gave incentive to farmers to adopt these varieties in the village Dantilia. The result of logit model analysis showed that farmer's contact with the extension service, basic education, access to the post-harvesting technology such as threshing machine and store-house were positive significant determinant of the NERICA technology adoption. On the other hand, our result show that increasing farmer's age was negatively influencing their decision to introduce these high yield rice varieties.

## **4. Conclusion**

Farmer's agricultural technology adoption decision depends on their socio-demographic characteristics and institutional effectiveness. We recommend that policy should be formulated to take advantage of the factors that positively influence farmer's decision to adopt modern agricultural technology production and mitigate the negative ones.