

# Climate-smart rice varieties for risk-prone smallholder farming in Guinea

## Initiative

The Japan Emergency Seed Project specifically for Guinea in collaboration with TAAT, produced over 10 tonnes of foundation seed of widely cultivated mangrove and lowland rice varieties. To increase the varietal portfolio especially with new mega climate-smart rice varieties in Guinea and beyond, over 1 tonne of foundation seed of NERICA L19<sub>sub1</sub> and WITA 4<sub>sub1</sub> was also introduced.

From the foundation seed of these varieties, at least 400 tonnes of certified seed are expected to be produced by farmer seed producers, with technical support from the research institute (IRAG). The expected certified seed which will cover 8000 ha, should reach 32,000 smallholder rice farmers in Guinea alone and benefiting an estimated 160,000 individuals.

A farmer – Abou Camara of Koba in Guinea who has been involved in rice farming since 1998, received Mbapeya and ROK5 as well as the new climate-smart varieties – NERICA L19<sub>sub1</sub> and WITA 4<sub>sub1</sub>. Monitoring visit was conducted by Africarice and IRAG at crop maturity stage and during a visit to his farm, Abou indicated that he has been receiving rice seeds from AfricaRice since 1998, including NERICA L19 in 2016.

The NERICA L19 he received in 2016 does not have the flood tolerant submergence gene. But with the new NERICA L19<sub>sub1</sub> and WITA 4<sub>sub1</sub> which have the flood tolerant gene, Abou reported that these varieties were able to tolerate flooding when it occurred at the vegetative stage, for a period of 10-days and yet, the crop was able to show normal growth.

“Both NERICA L19<sub>sub1</sub> and WITA 4<sub>sub1</sub> showed high promise of an excellent harvest despite the flooding in my farm – something I have never experienced in the past with the earlier AfricaRice varieties. I am proud of this scientific achievement,” Abou said.

