

Rice Productivity Gains with Improved Technologies

By Richard Bockarie

“If you can just increase your rice area under cultivation and adopt improved rice technologies our country will not only be self-sufficient in rice production but will come up with surplus for export”, Dr Idris Baggie has told rice farmers in Bo and Kenema districts.



A cross section of the Rice Farmers

Dr. Baggie is the Head of the Agronomic Task Force of several rice projects supported through the Africa Rice Center .He made this statement at a briefing session of more than 20 rice farmer group representatives ahead of the implementation of research and development projects intended to improving the productivity and production of rice in the Inland Valley Swamps and Riverines in the two districts.”The purpose of this gathering is to apprise and prepare

you about the implementation of the upcoming rice projects with the objective to booster your productivity and production”, he said.

He disclosed that one of the projects will make available to the various farming groups in the two rice hubs or districts NERICA L19, a high yielding and early maturing rice variety that is resistant and tolerant to several hazards local rice varieties are prone to. It will be used for both multiplication and for their own cultivation.”We will also provide for your use fertilizer and loans to cover labour cost and other reasonable expenses the project can accomodate”, he told them. He lamented that in addition to the use of inherently low yielding rice varieties, farmers rice yields in the country are often very low because of very poor land preparation including nurseries and weed infestation, inadequate fertilizer application as well as poor post harvest practices also leading to seed mixture that affect the production of quality seeds.

He said that the project will also handle the problem of soil toxicity and infertility by working with randomly selected farmers in their respective farms.”Three small and separate plots will be demarcated where farmers will be able to see for themselves and make conclusions on the performance of the ROK 24 rice variety, Rok 24 without zinc nutrient solution and Rok 24 with zinc nutrient solution and rice husk”, he explained the method that is to be used.

He also disclosed that Rokupr Agricultural Research Centre (RARC) outreach agents on the ground will help farmers to raise good seeds as well as help them learn and apply good agronomic practices; adding: “for other rice

farmers to similarly benefit by owning for themselves this high yielding rice variety and help multiply same for other needy and interested farmers, they will be required to repay their loans in seed rice as well as sell part of the rice harvested to the project”.

At the same time, he explained how weeds significantly reduce farmers rice yields in the country saying: “counterpart farmers in countries renowned for rice production get seven tons per hectare. “In Sierra Leone our farmers get the pittance of 1.43 metric tons per hectare”.

He told the farmers how weeding here by hand is not only time consuming but expensive in terms of labour and many times may be even unaffordable adding that the use of so-called chemicals or herbicides have not helped the plight of farmers considering the health hazards involved, cost and unaffordability. For this reason and to help catch-up by closing the alarming yield gap, he told the rice farming group representatives that the project will be introducing Rotary Weeders .Farmers will be trained how to use the technology and select the best for their situation.

Dr. Baggie told the farmers that the rotary weeder can only be efficient and effective when rice seedlings are transplanted in rows. He Explained how this is done and dilated on the benefits of the technology including its simplicity to use, low cost, easily incorporating



Dr. Baggie explaining the uses of the Rotary Weeders

weeds into the soil which will serve as source of plant food for the rice seedlings transplanted as well as improving the soil structure.

He also apprised them about how a research related project known as Nutrient Omission Trial (NOT) will be implemented. This, he said will deal with the issue of fertilizer use including the exact quantity required for the rice crop per unit area. "Our farmers only use the quantity of fertilizer they can afford", he said. He added that too often the rice crop is under fed frequently resulting to very low yield.

The rice projects are implemented by the RARC under the Sierra Leone Agricultural Research Institute with support and backstopping from Africa Rice Center. Africa Rice is an association of 24 Africa member states and one of the 15 international Centers supported by the Consortium of International Agricultural Research Centers (CGIAR). The mission of Africa Rice is to contribute to poverty alleviation and food security in Africa through research, development and partnership activities aimed at increasing the productivity and profitability of the rice sector in ways that ensure the sustainability of the farming environment.