



Conventional tillage (left) vs conservation agriculture technology of direct seeding in a thick mulch (right)

Implementing

Partners: AfricaRice, in partnership with local partners, including the National Cereals Research Institute (NCRI) in Nigeria, Rwanda Agriculture Board (RAB) in Rwanda, and Senegalese Institute of Agricultural Research (ISRA) in Senegal



AfricaRice is working with the Sustainable Rice Platform, which has developed the world's first rice sustainability standard and impact indicators, to identify sustainability levels of rice farmers in Africa.

Through interacting with farmers, service providers generate recommendations based on target yields and available financial resources using the RiceAdvice mobile app.



Capacity-building in good agricultural practices (GAP) helps enhance productivity in rice-based systems.



RESEARCH PROGRAM ON Rice

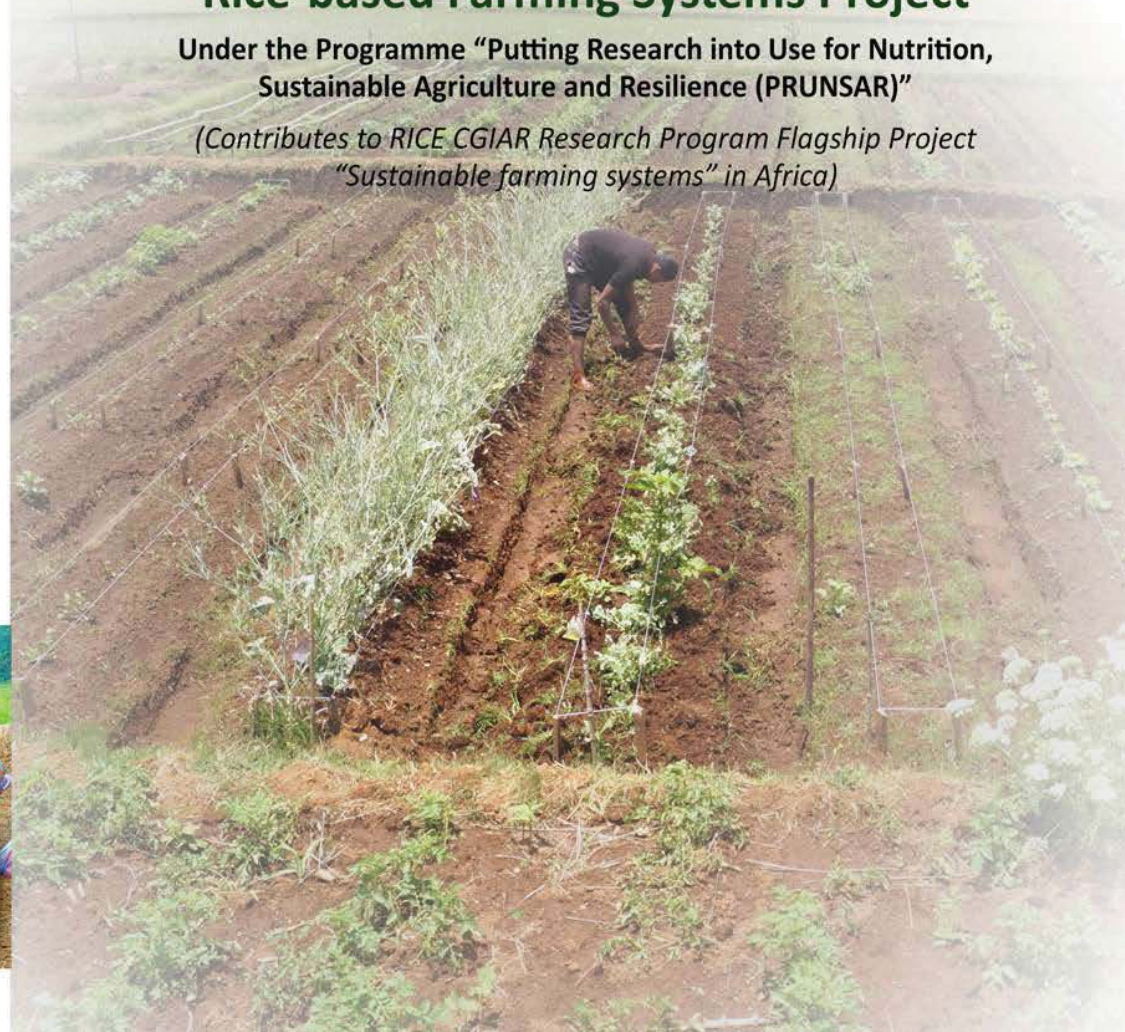


AfricaRice

Sustainable and Diversified Rice-based Farming Systems Project

Under the Programme "Putting Research into Use for Nutrition, Sustainable Agriculture and Resilience (PRUN SAR)"

(Contributes to RICE CGIAR Research Program Flagship Project "Sustainable farming systems" in Africa)





Visit: RiceAdvice website (<https://www.riceadvice.info/en/>)

Rice is the most rapidly growing food commodity in sub-Saharan Africa (SSA) and boosting domestic supply is clearly important for the region. At the same time, rice needs to be produced in more sustainable and environment-friendly ways amid challenges posed by climate change.

Sustainable intensification and diversification of rice-based farming systems can lead to enhanced income generation for farmers and provide greater access to more diversified agricultural products, with a positive influence on their health and nutrition.

The 'Sustainable and Diversified Rice-based Farming Systems' project, 2019-2021, seeks to deliver and disseminate on-farm intensification and diversification options for improved food and nutritional security and poverty reduction in the target SSA countries, while minimizing impact on the environment.

Goal: Contribute to improving food and nutritional security and poverty alleviation of local communities in Africa.

Objectives: The overall objective of the project is to sustainably intensify rice-based farming systems, while minimizing their environmental footprint and adapting them to climate change. The specific objectives of the project are to improve crop management technologies and practices and diversify farming systems.

Target countries: Nigeria, Rwanda and Senegal (technology development/testing will also be done in Côte d'Ivoire)

Target beneficiaries

- 3,000 stakeholders (direct). The beneficiaries include smallholder farmers; private sector (e.g. rice millers, input dealers, equipment manufacturers, small and medium entrepreneurs); extension agents; service providers especially youth; development partners; and researchers
- 27,000 stakeholders (indirect)

Outputs

1. Decision support tools such as RiceAdvice and WeedManager improved and disseminated
2. Appropriate integrated crop management practices and mechanization options identified and disseminated
3. Options to diversify rice farms with other crops developed, tested and disseminated
4. Adequate project coordination, monitoring and evaluation, and communication established and implemented



Direct seeded rice can increase net profit by reducing labor, production cost, irrigation water, greenhouse gas and drudgery.

A prototype motorized weeder for rainfed lowland and irrigated conditions was developed with combined features of double row Indian and Japanese-type motorized weeders for effective weed control.



The fertilizer seeder (right) can place seeds and fertilizers together in one go with reduced labor requirement

Putting Research into Use for Nutrition, Sustainable Agriculture and Resilience (PRUNSAR) Co-funded by European Union and IFAD

PRUNSAR has a focus on applied research. PRUNSAR works through CGIAR Research Programs to achieve results that impact on livelihoods of smallholder farmers and poor rural communities. The overall objective of projects under PRUNSAR is to put research into use at scale in sustainable agricultural systems with large potential impacts on nutrition and resilience. for scaling up.

Projects under PRUNSAR seek to develop and test innovative approaches that impact positively on the livelihoods, nutrition or resilience of pilot rural communities and smallholder farmers and to generate lessons for scaling up.