

Musomesa Field School (MFS) approach for Upland rice ecology

The 2022B season in upland sites started in early June with sensitization and group meetings for the rice farming communities. Since MFS is a participatory extension approach, farmers are involved in the planning and implementation of all the activities. MFS participants are sensitized to take part in the planning and sharing insights of how the training programs can be implemented better.

The Project has registered new districts under the different ZARDIs because more areas in Uganda have adopted rice cultivation, however there is need to transfer improved rice cultivation techniques to the farmers for increase of rice production and productivity in the districts.

A total of 10 new districts have been registered in the 4 ZARDIs i.e., Rwebitaba ZARDI; Kamwenge, Kyenjonjo and Kyegegwa districts – Ngetta ZARDI; Kole, Oyam and Amolatar districts – Bulindi ZARDI; Kikuube & Kagadi districts and lastly Abi ZARDI; Yumbe and Obongi districts.



MFS group sensitization - Bunyangabu District, Rwimi Subcounty

Improvement in technique adoption and farmer to farmer training

One of the objectives of the MFS is to increase the rice technique adoption rate. During the MFS seasonal trainings PRiDe II monitors the technology adoption rate and transfer process in farmers' fields.

The PRiDe II team observes farmers' fields to confirm whether the dissemination of techniques such as line planting and timely weeding is being followed either by new MFS farmers, neighbors of the MFS or the MFS graduates. The team provides technical advices on farmer's field issues during the monitoring and evaluation activity. During the recently concluded monitoring activity, Ms. Susan Mukwa a host farmer of the MFS demo garden in Kamonkoli S/C, Budaka district testified with confidence about the increased rice yield after attending the MFS. Before attending the MFS training, she harvested 6 bags (600kg) from ½ acre of land, however, after acquiring the improved rice cultivation techniques she harvested 14bags (1,400kg) in the same field. Her livelihood has been improved as she can now afford to pay school fees for her children, renovate her parents' house among other.

Ms. Susan is one of the many farmers who achieved increase of rice production and productivity through the MFS approach. Farmers who adopt the techniques and transfer them to neighboring farmers are rewarded with MFS baby demo flags to make them stand out in their communities so that they can disseminate the techniques to more farmers.

Ms. Sarah (with blue dress) - a farmer posing with the MFS baby demo flag in her garden in Kamonkoli S/C, Budaka district



PRiDe II carried out a farmer exchange visit where farmers from Kween district visited the MFS demo field in Budaka district. The purposes of the technical exchange are to improve on the farmer's visual impact and build strong community relations.

National Performance Trial Evaluation Meeting

On 14th June 2022, Mr. Kojima JICA – PRiDe expert (Rice Breeding) held an evaluation meeting to discuss the results of NPT 2021B, and to train the new NPT team members from Kamenyamigo Station, Mukono ZARDI and Tochi Irrigation Scheme, Oyam district among the other ZARDI participants on management of the NPT fields including water and weed management.

The participants from each NPT site; Ikulwe station, Doho Irrigation Scheme, Ngetta ZARDI, Olweny, Tochi, Kamenyamigo and NaCRRI presented their results on the 8 rice varieties that were cultivated in the season of 2021B.

After the meeting, Mr. Kojima gave a lecture on heading observation in the NPT field, NaCRRI and the participants had an opporunity to see the differences of heading among the varieties. It is expected that each participant will collect more precise data towards release of the new variety.



Mr. Kojima (left) explaining to the participants - NPT field, NaCRRI

The participants were confident that they will be able to apply the learnt heading knowledge at their respective work stations for better data taking.

Field Experiments

PRiDe II has been implementing various experiments in the different ZARDIs and on station in NaCRRI.

One of the experiments in NaCRRI is to assess the Effect of Different Spacing on the Growth and Yield of Upland Rice. Plant spacing is among the key agronomic practices that influence crop growth performance and crop yield. Spacing of rice is a recent agronomic practice by most farmers in Uganda. NERICA 4 is used as the test variety under three treatment of 30 cm, 25cm and 20 cm between rows in a Randomized Complete Design with three replications. In fact, PRiDe II recommends the use of 30cm inter row spacing for optimum rice production for better growth, yield and ease in management practices.



PRiDe II Technician, Mr. Faizal taking data on plant height & tiller number in the experiment field

Results from the experiment will determine the effect of the different spacing on the growth, yield of Upland rice, to evaluate the ease in carrying out management practices under the spacing and cost benefit analysis.

NaCRRI Intern from Kagoshima University, Japan

PRiDe Uganda



Mr. Kohei Narishige from Kagoshima University, Japan



Mr. Kohei Narishige Kagoshima from University has started his internship in NaCRRI to improve his research skills. He will work with project staff & NaCRRI researchers and how learn to proceed with rice research properly until the end of March 2023.

Eastern Africa Grain Council Agribusiness Expo

Occasionally, PRiDe II participates in agricultural events with NaCRRI to network and discuss with farmers and other stakeholders in the rice sub-sector in Uganda, so that we could improve our knowledge and collect beneficial information in the sub-sector. Moreover, the Project advices farmers regarding site selection for rice cultivation, land preparation, the appropriate variety for the different ecologies, agronomic practices, postharvest handling and so on.

The Eastern Africa Grain Council (EAGC) Agribusiness Expo was a two-day event on $24^{th} - 25^{th}$ June 2022 in Masindi. The Project showcased different rice varieties for both lowland and upland rice ecologies, improved machinery for example, motorized thresher and winnower, planting fork for upland rice cultivation and rotary weeder for lowland rice cultivation, cooperating with Bulindi ZARDI.

The expo was attended by farmer groups from Masindi, Hoima, Kibaale, Oyam, Apac, Gulu, Nwoya, Lira among other districts. PRiDe II staff had chances to answer farmers' questions about rice cultivation such as different rice diseases and how to avoid and treat them, frequency of weeding, how to apply fertilizer with appropriate timing and amount required for higher yields among others.



PRiDe staff Mr. Tendo (red jacket) explaining to farmers from Lira about which rice variety can be recommended to grow



PRiDe staff Mr. Tendo (left) explaining how to use motorized thresher to the Masindi Woman MP Florence Akiiki Asiimwe (right)

The farmers were advised that rice yield can be increased by, improving agronomic practices such as timely planting, proper spacing, timely weeding, timely and correct use of fertilizers and insecticides, timely harvesting, reducing post-harvest losses.

During the expo, about 10 farmer groups from different districts visited the PRiDe booth to learn improved rice cultivation techniques and collect information on the agricultural machines.