

PRiDe II NEWSLETTER

DECEMBER 2022

OUR RICE OUR PRIDE



Seed production activities

PRiDe II carries out seed production activities for various rice varieties in NaCRRRI and ZARDIs (Ngetta, Rwebitaba, Bulindi and Ikulwe station - Buginyanya). In NaCRRRI, the Project has been engaging in seed production of breeder, foundation, register and certified seed.

Breeder seed is used to produce foundation seed and then foundation seed is used to produce registered seed and finally registered seed produces certified seed. In PRiDe II, the certified seed is given to farmers during the Musomesa Field School seasonal trainings.

NaCRRRI technician, Mr. Jonah Ssemwogerere completed an 8-month training course on "Rainfed Rice Cultivation, Seed Production and Variety Selection Techniques" at JICA Tsukuba International Centre as Knowledge Co-creation Program (KCCP). He was intrigued by the topic on seed production which comprised of production of pure lines and foundation seed. It was a practical topic because transplanting was done by participants and all the activities including roguing at different growth stage, harvesting, drying and processing the seed for storage were covered in the training.

Mr. Ssemwogerere is currently in NaCRRRI applying the acquired knowledge and experiences into actual practices to improve his techniques under the direct supervision of Mr. Yoshino – JICA Expert.



Mr. Ssemwogerere (2nd from left) transplanting in the paddy field under the supervision by Mr. Yoshino

He says that during the study tour to Ibaraki Agriculture Research Centre, he was able to witness a rigorous and systematic process of producing pure lines and foundation seed when they toured the seed production fields at the centre.

He was also impressed by all gears to produce quality seed for farmers. This developed his passion for seed production activities.

He hopes to expand the knowledge acquired in Japan to be able to contribute to solving the seed problem in Uganda. This will enable farmers to have better access to good seeds and varieties of their preferences to accelerate increase of production, productivity and to improve their livelihoods.

Advancement of knowledge learnt under the Musomesa Field School Approach

Doho Irrigation Scheme is one of the irrigation schemes in Uganda to support increase of rice production.

After the end of the Musomesa Field School in the season 2022, farmers in the area have decided to maintain the mother demo garden under the direct supervision of the Agricultural Officer and the PRiDe team.

Farmers who grow rice in the irrigation scheme receive many guests and such guests observe irrigated rice cultivation and learn water management. Farmers have strong willingness to maintain their demo field because they want to show guests the improved rice cultivation techniques and enhance their community bond. This has also increased the farmers' confidence in rice cultivation due to the increase of the yield and advancement of the knowledge.



Farmers maintain the MFS demo field and trial plots to compare the rice growth between plots of random and line plantings

MFS activities are going on in upland and lowland rice cultivation areas, and many farmers desire to learn as many beneficial techniques as possible. Not only Agricultural Officers but also District Production and Marketing Officer (DPMO) and District Agricultural Officer (DAO) exhibit a keen interest in Musomesa Field School (MFS) approach as an efficient and effective extension method. They also visit MFS demo fields to attend graduation ceremony and interact with farmers who participated in the seasonal training to make certain of impacts of MFS activities.

Exchanging ideas with Sasakawa Africa Association (SAA)

On 5th December 2022, PRiDe II had a meeting with Sasakawa Africa Association (SAA) in order to exchange ideas on regenerative agriculture and discuss the possibility of the future cooperation.

The SAA aims to increase farmers' income, and food and nutrition security in Africa. Currently, programmes are going on in Ethiopia, Mali, Nigeria and Uganda. The SAA started their support in Uganda based on a memorandum signed by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) in 1996 with the aim of strengthening food security and improving the income of smallholder farmers through dissemination of advanced agricultural technologies to farmers who grow maize, cassava, rice and so on. The SAA also works together with JICA Volunteers in Zirowe and Buikwe to promote rice and support farmer groups.

After introducing each project activities in Uganda, we exchanged ideas regarding environmentally-friendly rice cultivation technologies such as decarbonization by using organic materials to reform soil quality. We had a positive discussion about cooperation to develop the technologies in Uganda.

We also had a beneficial discussion in terms of supplying pure seed of upland rice. The SAA has faced the difficulty of access to the pure rice seed, however, NaCRRI and PRiDe II would be able to provide foundation seed which are produced in NaCRRI. We will deepen such consultation towards win-win outcomes.



Exchanging ideas with SAA team, Mr. Hanai (General Technical Director, upper middle), Ms. Shinozaki (Junior Program Officer, next to Mr. Hanai) and National staff (blue shirts) at NaCRRI

Research Reviewing & Planning Meeting

PRiDe II held the Research Reviewing and Planning Meeting on 14th December 2022 at NaCRRI. Researchers and technicians from NaCRRI, ZARDIs and NaSARRI reported the result of experiments conducted season 2022A and shared the plans of seed production in 2023.

First, the results of National Performance Trial (NPT) in each 7 site, NaCRRI (Namulonge), Ikulwe station (Buginyanya ZARDI), Doho irrigation scheme, Ngetta ZARDI, Olweny, Tochi and Kamenyamigo station (Mukono ZARDI) were shared. There were 8 Trial varieties and lines in 5 sites with 3 released varieties (WITA 9, NERICA 6 and Okile) and 5 breeding lines (KAF 39, KAF 40, AR73, I-1 V-1 and PRIDE 1).

In NaCRRI, there were 10 varieties including K5 and K85 in addition to those 8 varieties.

It was reconfirmed that the severity of the symptoms of Rice Yellow Mottle Virus (RYMV) were significantly low in PRIDE 1 as well as NERICA 6.

Regarding the productivity of each variety and line, there was no significant difference between released varieties and breeding lines. Productivity of PRIDE 1 was slightly higher than NERICA 6 in most of the NPT sites, therefore, PRIDE 1 has a beneficial effect on areas where the damage of RYMV is serious.



Discussing on the results of NPT supervising by Mr. Kojima, JICA expert

One of the experiments is to confirm the effect of chemical fertilizers and organic ones. It was clarified that the productivity was significantly higher in the plot of integrated fertilizers mixed with chemical and organic ones than the plot of only chemical fertilizers. The purpose of this experiment was to find out ways for improving soil structure by using organic fertilizers.



Mr. Moses Elesu, Technician from Ikulwe station, sharing the result of experiment to find out the appropriate density ratio of seedling of PRIDE 1

There were many other experiments conducted to improve cultivation skills and knowledge based on conditions of farmers' gardens. For example, an experiment to make clear the appropriate amount of herbicides and an experiment to find out good timing and frequency for applying fungicides to control rice blast.

The researchers attended the meeting had beneficial discussions to consider the result of each experiment to improve the capacity of conducting experiments. The meeting is quite a great opportunity for researchers and technicians not only to strengthen their specific knowledge on experiments but also to enhance the horizontal connection between the target research institutes. JICA experts also gave valuable advises for better management of experiments.

The knowledge found through each experiment will help farmers in Uganda in the near future.

