

Annex 5 Conclusion and Recommendation

Conclusion and Recommendation FNCA JFY2012 Workshop on Mutation Breeding Project

1. The meeting recognized that the achievement of 2nd Phase of project, namely quality control of rice by MB, is remarkable and benefited for member countries.
2. The meeting recognized from presentations of the Open Seminar on “Radiation and Nuclear Technologies for Crop Improvement and Productivity in Sustainable Agriculture”, 26-27 Feb. 2013 that the improvement of sustainability without reducing yield of harvest is one of the most important challenges of agriculture.
3. In this respect, the meeting agreed that the FNCA MB project should focus its effort on the improvement of sustainability of rice production by using mutation breeding in the 3rd phase of the project on MB after FY 2013.
4. Meeting agreed that the specific targeted rice varieties and characters of mutant varieties should be decided by each member country in order to meet national priority needs.
5. The meeting takes note that Mongolia studies MB of wheat and barley for the improvement of sustainability, since Mongolia does not cultivate rice.
6. The meeting recognizes that varieties with high ratio of yield/input (fertilizer and pesticide), disease resistant varieties, drought and high temperature resistant varieties, and other varieties more tolerant to climate change contribute to the sustainable agriculture.
7. The meeting encourages the member countries to use ion beam irradiated seeds for selection of useful mutant lines of rice.
8. In this connection, the meeting urges the JAEA to kindly provide the irradiation of rice seeds by its heavy ion beam accelerator.
9. The meeting suggests that the MB project should consider possible synergy with application of PGP (plant growth promoter) and biofertilizer developed by FNCA projects to enhance sustainable agriculture for rice.
10. The meeting understands that IAEA/RCA MB project from 2012 focuses on development of crops better adaptable to global warming and climate change, and suggests that FNCA project should have possible cooperation with IAEA/RCA in the area of MB of rice, mutation techniques, human resource developments, which should be the common interest, though joint activities such as expert exchange and meetings.
11. The meeting agreed that mutation breeding R/D teams in nuclear research institutes should enhance the collaboration with agriculture sector which is the end-user of mutant varieties from the planning stage of the project.
12. In conclusion, the meeting urges the 14th Coordinators Meeting to approve the extension of the MB of rice project to the 3rd phase.