



National Academy of Agricultural Sciences

*Round Table
on*

GM Crops for Nutritional Security

February 12, 2014; NAAS, New Delhi

RESOLUTION

Resolution passed by the Roundtable Meeting on “GM Crops for Nutritional Security”, held at the National Academy of Agricultural Sciences, New Delhi on the 12th February, 2014 under the chairmanship of Prof. M.S. Swaminathan, Founder Chairman and Chief Mentor, M.S. Swaminathan Research Foundation, Chennai

The Round Table group discussed the potential of GM crop technology in solving the entrenched low farm productivity, malnutrition and hidden hunger problems in a large section of Indian population, particularly, women and children in the underprivileged sections of our society and resolved the following.

1. GM crop technology is a promising, relevant and efficient technology for low-input high-output agriculture for crop improvement where conventional breeding tools have not been effective. GM technology will be a tool to improve agricultural crops for their nutritional value, nutrient & water use efficiency, productivity, tolerance/resistance to biotic and abiotic stresses.
2. The present de facto moratorium on the field trials of GM crops should be lifted at the earliest. It is putting the clock back in relation to progress in harnessing the benefits of GMO technology in agriculture. Confined field trials are essential for the evaluation of productivity performance as well as food and environmental safety assessment. The non-conductance of regular field trials is a handicap as well as disincentive in harnessing the benefits of a wide array of transgenic material available with different research organizations. Many of these research materials have excellent resistance to diseases, pests, drought and salinity as well as improved nutritional quality. Much of this work has been done in research organizations committed for general public good and by young researchers who are getting increasingly discouraged due to lack of clear policy on the future of GM crops.
3. The Indian biosafety regulatory system is in compliance with the international regulatory consensus based guidelines. The system, put in place under the Environment Protection Act (1986) should dynamically evolve, update, adopt and implement the biosafety protocols and procedures. The bill on Biotechnology Regulatory Authority of India introduced by the Government needs to be pursued further taking into account the observations by all stakeholders. Meanwhile the existing three tier system of IBSC, RCGM and GEAC has done a good job and should be strengthened with adequate infrastructure and technical support to continue with the confined field trials so that the research progress is not halted.
4. The Agricultural Biotechnology Committee chaired by Prof. M.S. Swaminathan submitted its report in 2004 for a Parliament approved Regulatory Agency as well as

conducting All India Coordinated Trials with GMOs, taking all necessary precautions. In the process, it is required to consider during risk assessment the genuine concerns of the GMO opponents on a scientific basis.

5. After biosafety clearance by the GEAC, ICAR should play a key role in the commercial release of the GM crops to prevent undue proliferation of large number of hybrids/varieties.
6. The national regulatory system should integrate capacity building as a necessary operational requirement to keep pace with scientific advancement through international collaborations to evolve as the most effective system including collaborations with countries such as USA, Australia, Canada, Norway and Brazil.
7. Scientists should communicate with public and policy makers about the safety and benefits of GM crop products and remove the undue fears and apprehensions about GM crop adoption. A media resource centre may be set up for providing up-to-date scientific information to media representatives and dispel any misinformation.
8. The Academy may set up two Committees on the pattern set up by the Royal Society of London, a. Committee on Public Understanding of Science, b. Committee on Political Understanding of Science.
9. Until the time a Parliament approved autonomous National Biotechnology Regulatory Authority comes into existence, RCGM & GEAC should have full time chairpersons as recommended by SAC to PM and GEAC should issue 'Decision Documents' at the time of allowing field trials of a GM event and at the time of final release of a GM event.
10. The GEAC should function like a statutory body and make final decision on approval of the GM event for environmental release. The "No-Objection" certification from state governments for conduct of confined field trials is not required as their products will not get to farmers or consumers.
11. Agriculture is a state subject and it is important that the State Agricultural Universities and State Departments of Agriculture are involved in the implementation of the field trials but without losing time. Some states are declaring themselves an organic state which precludes the use of GM crops. However, organic farming would require effective methods to face the challenge of pests and diseases.
12. Nutritional security involves attention to balanced diets and nutrition literacy. The Food Security Act 2013 will ensure that all needing social protection against hunger will be able to get the needed calories. However, it is required to attend to other nutritional problems such as protein hunger and hidden hunger caused by the deficiency of micro-nutrients and vitamins.
13. There is need for a PAN-political support for promoting genetic engineering research in our country to harness its full potential.
14. Return from investments in biotechnology research is very high. Public and private sectors should develop a joint strategy which will help to ensure the inclusiveness of access to improved technologies among all farmers, small or large.
15. To achieve a zero hunger challenge of the United Nations by 2025, we must double the small farm productivity. Such an increase will be possible only through the intelligent and intensive applications of new technologies such as Biotechnology.