## National Seminar on "Applications of Science and Technology to Promote Agricultural Growth and Value Addition" 2<sup>nd</sup> and 3<sup>rd</sup> December 2012 Recommendations

- Crop Biotechnology has a great potential to effectively address some of the major challenges such as biotic (pests, diseases, weeds) and abiotic (drought, cold, salinity, etc.), nutritional enhancement, increased shelf-life, and the now emerging climate change that are responsible for stunting the agricultural growth in the country. The country needs to adopt policies that promote the deployment of such new technologies. GM technology is to be adopted as an extension of conventional breeding for the progress of Indian agriculture.
- Harness the power of germplasm for selecting genes for GM food crop development.
- Need for assessment of gaps in gene banks and more intense need to eliminate redundancy in gene banks. Focus now should be on characterization and evaluation of genetic resources in available germplasm.
- Deploy molecular tools to evolve new descriptors for evaluation of new traits in terms of taste, colour, nutritional value etc to expand the choice and variety of agricultural products.

- Under the changing global scenario under the new IPR regimen, there is a need to urgently workout modalities for benefit sharing by both public and private sectors.
- We should make every effort to make use of all available technologies such as traditional breeding, organic farming, Biotechnology etc. for the improvement of agriculture. There is excellent scope for integrating all these technologies rather than being biased towards any.
- It is desirable to create an "Agricultural Commission" in the model of Department of Atomic Energy (DAE) to recommend highly focused agricultural products development. Prioritize some crops of national importance and concentrate on improving them from various perspectives.
- Enormous safety data on *Bt* crops have already been generated in more than 25 countries and various *Bt* crops have been under commercial cultivation for the last 16 years (10 years in India) with significant social, economic and environmental benefits. There has been no scientifically proven adverse affects of these crops on humans, animals, plants or the environment. Despite, the same old allegations regarding its safety are being repeated , spreading misinformation and fear, thereby delebarately delaying diffusion of such new technologies. This should be discouraged.

- In matters related to Science, the policy makers are best advised to consult the scientists and scientific bodies and be guided by their recommendations for policy decisions.
- The country, both in public and private sectors, has spent considerable resources in developing such technologies. If deployment of such technologies is delayed, it would amount to a colossal waste of national resources.
- The country has a good regulatory system, on par with developed countries, but it has been made almost dysfunctional by strident activism and needless court interventions.
- This meeting appeals to the authorities concerned and the courts not to be distracted by unfounded criticism of the technologies, false and motivated propaganda. They should responsibly promote technologies that can provide potent solutions to the many problems that our country is facing.
- If the major objective of organic farming is to eliminate the application of chemical insecticides (also chemical fertilizers), they should adopt *Bt* crops. While they are ready to use *Bt* as spray formulations, their opposition to *Bt* transgenic technology is difficult to understand.