## **8** Future Programmes

The varietal improvement and consequent incidental agronomic and plant protection investigations are continuous unending process. In agriculture, which is an applied biological science, an innovation solves some problem leading to certain progress but the same is soon followed by new problems. Any slackening of efforts in agricultural research is beyond comprehension. Keeping resource availability, priorities have been considered and following areas of research identified.

- Breed varieties and hybrids using hybridization, biotechnology, selection and use of wild species tolerant/ resistant to biotic and abiotic stresses.
- Enhance productivity, quality and reduce duration of desi cotton for organic cotton and technical textile.
- Evolve high yielding physiologically efficient and low input responsive cotton varieties suitable for cultivation under scanty rainfall conditions.
- Workout suitable agro-techniques for each of the traditional as well as newly coming up varieties/hybrids to obtain maximum produce per unit of land, inputs and time in the changing environment scenario.
- Keep a constant watch on changing pest and disease pressure and to evolve suitable bio-chemo, agro-techniques to keep them under control so that production hazards are minimized
- Produce high quality seeds of parents of Bt/Non Bt hybrids and stable varieties.
- Demonstrate the technology at farmer's field through various extension modes.
- Develop new transgenic hybrid with higher yield and stability
- Intensify research on jassid resistance and stress tolerance using marker assisted selection.
- Initiate research on climate change its effect on physiology & devise strategies to mitigate the same
- To develop agro-techniques for cotton grown under High Density Planting System (HDPS)
- > To develop microbial consortium for organic farming of cotton
- To test new slow releasing nutrient sources