MANDATE

Research work is in progress to evolve suitable duration, medium tall, high yielding variety coupled with resistant to major pests and diseases under rainfed conditions of Gujarat. Yield barrier could be broken considerably by reducing the duration, medium to mid-tall plant height and by developing resistant lines to shoot fly, stem borer and grain mold. Our attempts to improve genetic potential for grain yield, to develop simple farming systems and to identify constraints responsible for production are stated below. The overall mandate is to hasten the research of sorghum in the state in traditional areas and new find the new areas with multiple objectives of sorghum cultivation like for food, feed, fodder, Hudda etc. and developed the suitable improved sorghum genotypes for various uses. The station is working on the following objectives to fulfill the mandates.

➤ Basic and strategic research to increase productivity of sorghum and their diversified utilization for enhancement of profitability.

- ➤ Development of early maturing and high yielding grain sorghum varieties and hybrid with better quality for *Kharif* adaptation.
- > Development of high yielding with better quality fodder sorghum varieties.
- ➤ Generation genetic material with acceptable grain quality for evolving high yielding varieties/ hybrids.
- ➤ Development of high yielding with better quality grain sorghum varieties for *Rabi* Adaptation.

> To produce breeder seed of improved varieties, high yielding varieties and parent seed of released sorghum hybrids.

- > Development of improved sorghum cultivars resistant to major inset and pest.
- ➤ Develop and popularize plant protection practices to major insect and diseases.
- > To develop the remunerative and sustainable production technology to suit the farmer's needs including for new release variety/Hybrids.
- > To evolve varieties/ hybrids resistance to shoot fly, stem borer, earhead worm, grain mould and sugar diseases and pests.
- > Transfer of technologies through on-farm and frontline demonstrations.
- > To impart sorghum training to the extension workers and farmers
 - → Develop and evaluate genotypes for Hudda purpose.
 - → Exploitation of sorghum for non-traditional especially ethanol, jaggery and sorghum syrup.