

Success Story Under RKVY

Production of Groundnut Breeder Seed at Farmers' Field

For Supplying sufficient quantity of good quality true to type seed

Back Ground & Objectives

Groundnut- wheat and Cotton -wheat are two principal cropping sequences of Saurashtra region of Gujarat under the jurisdiction of Junagadh Agricultural University representing ten districts viz., Amreli, Bhavnagar, Jamnagar, Junagadh, Porbandar, Rajkot, Surendranagar, Devbhoomi Dwarka, Gir Somnath and Morbi, covering about 32.82 per cent area of the Gujarat State. The region is endowed with 788 kms of sea coast stretching all along from gulf in the north west through the Arabian sea in the South up to the Gulf of Cambay in the east. The University is functioning in a typical Arid and Semi Arid type of climate in the state. Hence, drought, erratic rainfall, low fertility and salinity ingress are the major constraints limiting productivity and prosperity of the agriculture of this region. The major crops grown in the region are oilseeds (groundnut, sesame, castor), cotton, pearl millet, wheat, spices followed by mango and sapota among fruits. Groundnut crop is the backbone of Saurastrian farmers covering an area of around 17 lakh ha. in *Kharif* season and 1.5-2.30 lakh ha. area in summer season where the irrigation facilities are available in South Saurashtra and some part of North Gujarat.

The seed is the basic constituent and difficult to get input for cultivation. Seed is prime input for agriculture because it reflects production level and cost of cultivation. The usefulness of other inputs for increasing productivity and profitability of crops depends on seed. Availability of seed has unfortunately not been up to the mark till date mainly because of low seed multiplication ratio in spite of the involvement of public sector seed producing agencies in groundnut seed production. In year of 2014-15 the availability of groundnut breeder seed was about 50% of the indent, as groundnut SRR was very low compared to GOI norms in this Crop. To achieve the higher SRR, the supply of the breeder seed must be increased. So, considering the limitations of the University farms it is necessary to produce breeder seed at farmers' fields based on participatory Seed Production Programmes under RKVY. The main aim is to provide the recently released, high yielding, widely adapted varieties to farmers. With this view, this project was undertaken to produce breeder seeds of groundnut on farmers' fields.



Intervention

Breeder seeds of groundnut were produced at farmers' field based on PPP mode under RKVY handled by the strict supervision of concerned crop breeder/Research Scientist(Groundnut) of Main Oilseeds Research Station of the University. Farmers were paid by JAU 15% more incentives from RKVY funds over the procurement price of foundation seeds of groundnut fixed by GSSC.

JAU initiated programme in the year 2014-15 with an allocated physical target to produce total 1660 quintal breeder seed on farmers' fields as per project guideline. Groundnut breeder seed production programme was taken-up in 77.50 acres and 9.0 acres for variety GG-20 and GJG-22 respectively on 12 farmers' fields during *kharif* season-2014. The 746.20 quintal groundnut breeder seed of GG-20 and 45.50 quintal of GJG-22 were produced during *kharif*-2014 with a financial support of Rs. 8.62 lakh.

The same production programme of groundnut variety GG-20 and GJG-22 was taken- up in 79.50 acres and 5.0 acres, respectively on 10 farmers' fields during *kharif*-2015. The 735.35 quintal groundnut breeder seed of GG-20 and 40.25 quintal of GJG-22 were produced during *kharif*-2015 with a financial support of Rs. 7.13 lakh.

Outcome

Under this project, 1567.30 quintal breeder seeds of popular variety of groundnut were produced which strengthened foundation and certified seed production chain. It helped to maintain the seed multiplication chain and increased SRR in Groundnut crop due to availability of sufficient good quality breeder seed.

The PPP mode of breeder seed production programme is very popular in farming community under JAU jurisdiction and there is huge demand for this system. Farmers are highly convinced about its benefits. Main objective of the project was to produce good quality, bulk quantity and true to type seed of popular variety in groundnut crop. The breeder seed produced through the project will accelerate the foundation as well certified seed production in groundnut. This will lead to the easy availability of certified seed to the farmers.



Field view of Groundnut Breeder Seed Production Programme at Farmers' Field



Roguing Activity in Groundnut Breeder Seed Production Programme at Farmer' Field



Field inspection in Groundnut Breeder Seed Production Programme at Farmers' Field