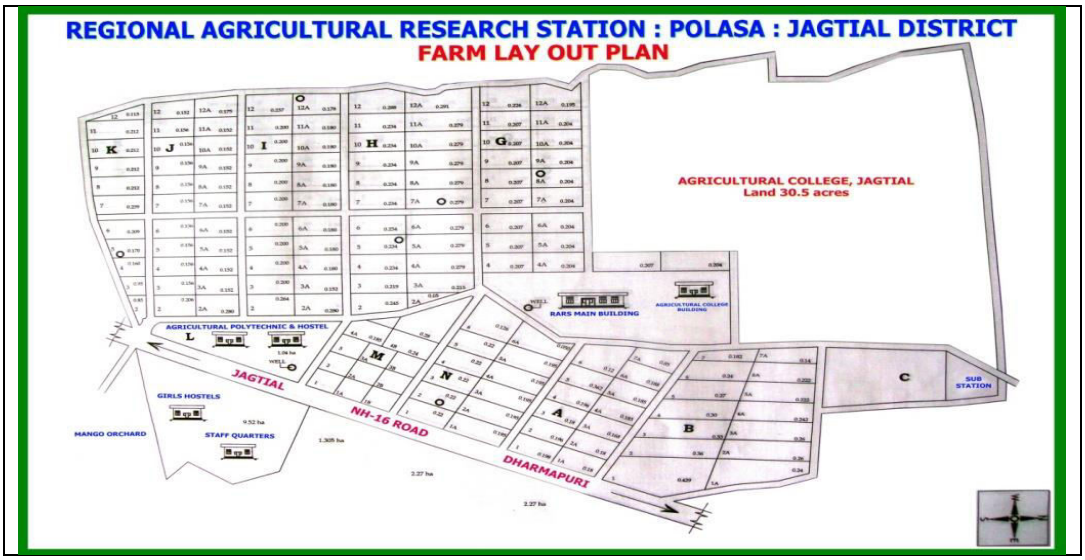
Name of the Research Station : Regional Agricultural Research Station, Polasa, Jagtial



2. Geographical layout:

1	Geographical position	:	Latitude: 18 49’ 40” North Longitude: 78 56’ 45” East
2.	Total area	:	48.96 ha
3	Cultivable area		35. 0 ha

3. Year of establishment: 1983

4. Mandate

- To identify and develop suitable crops / cropping systems for the command areas of Sri Ram Sagar ayacut.
- To develop high yielding varieties and hybrids with tolerance to biotic and abiotic stress in rice, groundnut and sesame.
- To produce breeder seed of elite varieties of rice and sesame.
- To develop innovative technologies in crop production and protection in various crops.
- To develop suitable water management technologies to enhance water productivity in different crops.
- To disseminate agromet advisories.

5. Significant achievements

RICE

- Developed nine rice varieties viz., Polasa Prabha, Jagtial Sannalu, Jagtial Sambha, Manair Sona, Karimnagar Sambha, Jagtial Mahsuri, Pranahita, Anjana and Prathyumna

and released (2002 to 2012) from Regional Agricultural Research Station, Polasa, Jagtial and are popular among farming community in Telangana and other states.

- Developed a long slender paddy variety Bathukamma (JGL 18047) similar to MTU 1010 in grain type and duration released in 2015. This variety has high yield potential of 7500-8000 kg/ha and has occupied very large area in different parts of the Telangana state and other states. It is further spreading very fast at farmers level by replacing MTU 1010 etc.
- Another high yielding, long slender grain culture, JGL 24423 with medium duration, non-lodging, and less grain shattering culture has completed 1st year minikit testing and proposed for 2nd year minikit testing during kharif. This is gaining popularity in farmers fields in Telangana and other states, suitable for kharif and rabi seasons.
- Also developed a medium slender grain type rice hybrid (JGLH 1), early duration (125 days) having fine grain and good cooking quality with good head rice recovery and high yielding hybrid. It has completed 1st year of minikit testing and proposed for 2nd year minikit testing.This hybrid has recorded the highest grain yield under multi-location test (MLT) in Telangana state.
- Application of 100% NPK (100 N: 50 P_2O_5, 40 K_2O kg/ha) during *kharif* season is sufficient to give the optimum grain yield of rice; additional application of farm yard manure improved the physical and chemical properties of the soil.

GROUNDNUT

- Developed a groundnut culture, JCG 2141 (105-110 duration) with high yield potential (3220 kg/ha) that is spanish bunch suitable for *kharif* and *rabi* / summer seasons; it has completed 2nd year minikit testing in AICRP centers. Another culture, JCG 4798, high yielding (3350 kg/ha) spanish bunch type suitable for *rabi* / summer was found to be superior over Kadiri 6 (2558 kg/ha) and proposed for MLT in AICRP trials.
- Seed treatment with imidacloprid 600 FS or thiamethoxam 30 FS @ 2 ml/kg seed (insecticide and water in 1:3 ratio) reduces sucking pests (thrips and leaf hoppers) protects the crop upto 20-25 days after germination.

SESAME

- In sesame, developed four high yielding varieties and released from Regional Agricultural Research Station, Polasa, Jagtial (1988-2006) viz., Rajeshwari, Swetha thil, Hima (White seed) for *rabi* / summer and Chandana (Brown seed) for *kharif* and *rabi* / summer seasons. They are increasingly becoming popularity among the farmers in Telangana and Andhra Pradesh states.
- Two white seeded sesame cultures, JCS 2454 and JCS 2696 were identified as suitable for summer and late *kharif* cultivation with high yield potentiality (1100-1150 kg/ha). The cultures have synchronous maturity, non-shattering seeds and tolerant to *Alternaria*leaf spot, powdery mildew.