

Success story under RKVY Project Implemented at UAS, Raichur

SUCCESS STORY- IV

Economic impact of production and supply of quality seeds of Pigeonpea/TS3R

1. Title: Economic impact of production and supply of quality seeds of Pigeonpea/TS3R

(Under the project: Enhanced Seed Production Programme)
(From 2011-12 to 2013-14)

2. Category: Agriculture

Most significant success story: Seed Production and supply

3 Challenges:

North eastern Karnataka is popularly known as pulse bowl of Karnataka, where pigeonpea is one of the major pulse grown at an area of 5.36 lakh ha under dry land situation.

The major varieties of pigeonpea grown by the farmers are medium and short duration such as Maruthi and Gulyal local. But these varieties are susceptible for fusarium wilt disease.

The major lacuna is the non availability of the varieties which are resistance/tolerance to the wild disease and in the field conditions the some patches of the land has been affected it can clearly visible as the dry patches in the pigeonpea field due to this per acre 2-3 qtl of yield has been less due to this disease.

Considering the these problems in pigeonpea, Agricultural Research Station at Gulbarga of UAS, Raichur identified new wilt resistant pigeonpea variety TS-3R, which is 8-10 days earlier to Maruthi variety and high yielding than the existing varieties is the major advantage to the farmer. The production and supply of good quality seeds of pigeonpea/TS3R is the major challenge.

4. Initiative:

To address the production and supply of good quality TS3R seeds to the farming community in large scale has been initiated with farmers only by the use of “Farmers Participatory Seed Production “ approach where the foundation seeds are distribute to the farmers along with the payment of seed certification charges in view of the plot has to be certified by the Karnataka State Seed Certification Agency as the certified seeds.

Before sowing the training has been given to the farmers regarding the seed treatment with use of trichoderma, rhizobium and PSB, method of seed treatment has also been demonstrated. Further the technical support has been given to the farmers by the visit of scientists to the farmers field and also the state seed certification officials visiting field to educate the farmers regarding the quality seed production.

Time Line of Work:

- Production of basic seeds of new variety.
- Distribution of quality basic seeds to farmers for further multiplication at 24 villages under participatory approach.
- During the critical stages, seed production specialists of the university were given technical guidance for quality seed production.

- In addition 2-3 trainings on quality seed production were also conducted.
- The seed plots confirming the field quality standards were procured from the farmers.
- On receipt of bulk seed materials the seeds were processed at university seed processing units.
- After necessary seed processing, the seed samples were drawn lot wise and sent to notified laboratory for confirmation of seed quality.
- After confirmation of seed quality as per the minimum seed quality standards, the seed lots were treated with fungicide and packed.

The quality seeds produced under the project was distributed to the farmers of this region directly at the university and through state Govt. distribution centers

Over all progress of project from 2011-12 to 2013-14

Sl. No	Name of the Project	Budge approval	Funds released (Rs.in lakhs)	Physical			Financial (Rs.in lakhs)		Remarks
				Unit	Target	Achievement	Target	Achievement	
1	Enhanced Seed Production Programme	100.0	100.0	Quintals	2650	3553	100.0	99.281	

5. Key result/interesting fact:

- Strengthened seed production facilities in the university.
- Produced 3553qtl new pigeonpea quality seeds involving 115 farmers at 24 villages.
- Covered 28424 ha of area under pigeonpea/TS-3R seeds produced by the project.
- Enhanced pigeonpea production by 53940qtl of additional yield with the use of quality seeds of TS-3R.
- Enhanced an additional income 2191.64 lakhs by the farmers by use of quality seeds
- Project out lay is 100 lakhs for three years and the additional income generated is about 2191.64 lakh Rs with the interference of this project.

Benefit to the farmers by this project.

1. Direct Benefit:

* Seed grower got the additional benefit of Rs. 34.21 Lakhs over three years

*Farmers are got the additional benefit of Rs. 2157.6 Lakhs over three years by use of Pigeonpea/TS3R seeds produced under the project.

2. Technical benefit.

Due to visit of scientists to seed production plots the farmers are updated with the latest pest management, disease management, weed management and also in the quality seed production of new pigeonpea/TS3R variety.

6. Impact of the Project:

The impact of the project has been given in the following tables, the impact has been in terms of two groups of farmers. First group of farmers (table-1) is directly involved in the seed production and gets the additional income by involved in the seed production , other group of farmers (table-2) are the farmers are indirectly benefited by the use of quality seeds of TS3R and gets the additional yield advantage over the farmers who use the seeds of the local varieties.

Table-1: Benefit generated to the farmers who involved in the seed production

Year	Crop	Variety	No of farmers involved	Qty of seeds produced	Additional benefit generated by involving in the seed production
2011-12	Redgram	TS3R	35	727	5.81 (@ 800/ctl) Lakhs
2012-13	Redgram	TS3R	52	1823	16.40(@900/ctl) lakhs
2013-14	Redgram	TS3R	28	1003	12.00((@1200 qtl) Lakhs
			115	3553	34.21 Lakhs

Table-2: Details of additional income generated by use of TS3R variety

Year	Crop	Variety	Qty of seed produced (ctl)	Area covered by the variety (ha)	Additional yield obtained at the rate of 1.5 qtl/ha	Additional income generated (Rs in lakhs) at the rate of 4000 Rs/ctl
2012-13*	Redgram	TS3R	727	5816	8724	348.96
2013-12	Redgram	TS3R	1823	14584	29168	1166.72
2014-15	Redgram	TS3R	1003	8024	16048	641.92
		Total	3553	28424	53940	2157.6

*The seeds produced in the year 2011-12 will be distributed in the next year i.e. 2012-13.

Table-3: Cumulative income generated through the project

Year	Crop	Variety	Additional Income Generated(Rs in Lakhs)		
			For the seed growers	For the farmer who use the quality seeds produced in the project	Total
2011-12	Redgram	TS3R	5.81	348.96	354.77
2012-13	Redgram	TS3R	16.2	1166.72	1182.92
2013-14	Redgram	TS3R	12.03	641.92	653.95
Total			34.04	2157.6	2191.64

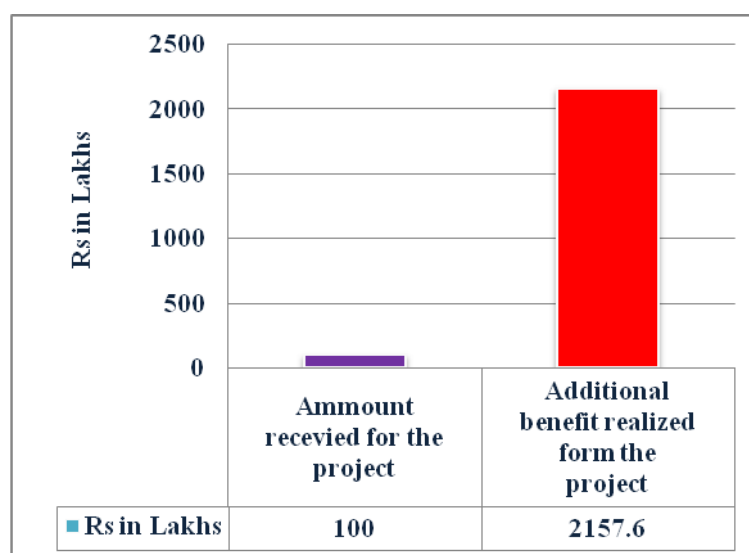


Fig-1: Economic impact of production and supply of quality seeds of Pigeonpea/TS3R under the project

7. Lessons learned:

The major challenge is the production and supply of the good quality seeds Redgaram/TS3R seeds to the farmers within the time. The production and supply has been successful with the proper planning from the selection of farmers, distribution of foundation seeds to the farmers, filed inspection by the scientists, seed certification officer, timely harvesting, threshing, drying, processing and packing. Regular monitoring has been done at the timely intervals.

The whole project is providing the information to the seed producers and seed growers about the new variety TS3R and its importance in the present situation of redgram production.

8. Images:



View of TS3R Seed and plant



Field view of TS3R grown in Jegerkal village of RaichurTq



Scientist interacting with the farmer in seed production plot under participatory programme



Seed growers involved in drying the seeds at seed unit, Raichur



View of seeds stored for processing at Seed unit, Raichur



Farmers buying the seeds at the sales counter at Seed Unit, Raichur

9. Additional information

a. List of all project partners who supported the work

Details	Name and Designation	Type of Contribution
Name of Principle Investigator	Dr.Basave Gowda Special Officer (Seeds), UAS, Raichur Ph-/Fax: 08532-220344 Cell-09480696343 Email: so.seeduasr@gmail.com sosuasraichur@rediffmail.com	Over all in charge of seed production and supply
Name of the Co-Principal Investigators	<ol style="list-style-type: none">1. Dr. Vijay Kumar, Asst. Prof. (SST), AC, Raichur2. Mr.Lokesh. G.Y, Junior Breeder, Seed Unit, UAS, Raichur3. Dr.S.B.Bellad, Asst. Prof. (SST), ARS, Gulbarga4. Dr.Lokesh, K Asst. Prof. (SST), ARS, Bidar5. Mr.B.S.Ganigar, Asst. Prof. (SST), Seed Unit, UAS, Raichur6. Mr.Prashanth.S.M, SMS KVK, Hagari7. Mr.Rakesh.C. Mathad Asst. Prof. (SST), Seed Unit, UAS, Raichur	Involved the identification of farmers for seed production, seed distribution, filed inspection of seed production plots and processing, packing and supply of seed materials to the farmers

b. Executive summary of the project

- Production of basic seeds of new variety.
- Distribution of quality basic seeds to farmers for further multiplication at 24 villages under participatory approach.
- During the critical stages, seed production specialists of the university were given technical guidance for quality seed production.
- In addition 2-3 trainings on quality seed production were also conducted.
- The seed plots confirming the field quality standards were procured from the farmers.
- On receipt of bulk seed materials the seeds were processed at university seed processing units.
- After necessary seed processing, the seed samples were drawn lot wise and sent to notified laboratory for confirmation of seed quality.
- After confirmation of seed quality as per the minimum seed quality standards, the seed lots were treated with fungicide and packed.
- The quality seeds produced under the project was distributed to the farmers of this region directly at the university and through state Govt. distribution centers.

10. Check List

Sl. No.	Question to be consider	Yes	No
1	The story interesting to the target audience of the project/activity report?	√	
2	Does the story explain what new insights the project brings? What is the main lesson learned from this story? Does the story describe a key insight on what works and what doesn't and something that future project could build on	√	
3	Does the story describe the outcomes the project produced and the people who are benefitting? What changes—in skills, knowledge, attitude, practice, or policy—has the project brought, and who is benefitting from these changes?	√	
4	Does the story make a compelling point that people will remember? Does the story show how the project makes a difference to improving livelihoods and lessening poverty?	√	
5	Does the story provide an interesting fact that people will remember? For example, how much yields increased, how many hectares of land could become more productive from this innovation or technology?	√	
6	Does the story explain what kind of impact this innovation or technology could have if scaled up?	√	
7	Does the story include quotes from Stakeholders or beneficiaries?	√	
8	Does the story show which partners contributed and how?	√	
9	Have I provided links to other media (journal articles, website news, newsletter, blogs, annual reports of other Programme/project) that also feature this story?		√
10	Have I provided the contact details of people who can provide more information?	√	

11. Contact person for this story

Dr.BasaveGowda

Special Officer (Seeds), UAS, Raichur

Ph-/Fax: 08532-220344

Cell-09480696343

Email: so.seeduasr@gmail.com

sosuasraichur@rediffmail.com