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Opportunity for Public Sectors for Enhancing the Availability of Quality Seeds – An Experience

Basave Gowda

Special Officer (Seeds) Seed Unit, UAS, Raichur-584104 (Karnataka), India, E-mail: bavaniseeds@gmail.com

Abstract: Quality seed is one of the most important biological product for enhancing the productivity of crop. Its production mainly depends on source of seeds, isolation distance, roguing and other post harvest operations followed during quality seed production programme. From the large scale demonstration, it was observed that about 15-20% of increment in yield can be obtained by use of quality seeds.

In order to produce and supply quality seeds, several government and private seed organisations were involved in large scale seed production and but they meet only 20% of the seed requirement and the remaining demand was met through unorganised seed system and farmer to farmer seed exchange and saving.

Many survey conducted and revealed that the farmer saved seeds are not meeting the prescribed quality standards leads to reduced/lower crop yields.

In view of the above, to supply quality seeds to farming community at regional level , a programme was initiated with alternative method of seed production and distribution involving farmers and scientists under participatory approach.

METHODOLOGY

In order to enhance the availability of quality seeds of newly released varieties, the Seed Unit of the University of Agricultural Sciences, Raichur, Karnataka, with the assistance of Govt. of India

implemented seed village programme, in which every year university selected more than 100 villages in six districts under the university jurisdiction. In each village about 50-150 farmers were grouped for quality seed production.

The selected farmers were supplied quality foundation/certified seeds for one acre each and then seed production specialists organised two to three trainings at village level in the selected beneficiary group on various aspects of quality seed production.

In addition to the training programmes on farm demonstrations were conducted about different practices for quality seed production.

Further, custom seed processing and testing facilities were also provided to willing seed farmers to sell the seeds produced at the village level and the selected farmers were honored for the quality seed production during *Kharif* and *Rabi* seed days organised at the university.

RESULTS AND DISCUSSION

Under the novel programme called “Seed Village Programme” the university produced new varieties of pigeonpea/TS-3R, greengram/BGS-9, Paddy/Gangavathi sona and other popular varieties involving more than 100 villages covering 5000 and

more farmers at village level in all the six districts under university jurisdiction.

- With the implementation of this scheme more than 5000 farmers are in direct contact with the university and getting the benefit of new technologies, varieties and knowhow.
- Due to this scheme, there will be direct linkage between the scientists and the farmers in identifying the problems faced by the farmers and which helped the scientists in formulation of technical programme and research activities.
- Due to availability of skilled human resources at the grass root level and that human resources can be used for quality seed production and other promotion of agricultural technologies both by public and private.
- Improving farm to market linkages through contract farming.

Table 1
Details of seeds produced at UAS, Raichur under Seed Village Programme

<i>Sl.No</i>	<i>Year</i>	<i>Crop</i>	<i>No. of farmers</i>	<i>No. of villages covered</i>	<i>Quantity Produced (Qtl)</i>
1.	2009-10	Groundnut	1110	14	4440
		Bengalgram	3262	33	16310
		Total	4372	47	20750
2.	2010-11	Groundnut	126	10	2072
		Bengalgram	10098	145	21314
		Total	10224	155	23386
3.	2011-12	Groundnut	345	8	3750
		Redgram	108	5	850
		Bengalgram	805	37	15000
		Paddy	1907	25	3000
		Maize	87	6	300
		Total	3252	81	22900
4.	2012-13	Redgram	712	11	2848
		Paddy	673	47	6730

contd. table 1

Sl.No	Year	Crop	No. of farmers	No. of villages covered	Quantity Produced (Qtl)
5.	2013-14	Groundnut	467	50	3828
		Soybean	234	10	1100
		Total	2086	118	14506
		Redgram	4288	124	8664
		Paddy	1829	63	11864
		Blackgram	10	2	20
		Greengram	100	4	350
		Soybean	698	33	2234
		Total	6925	226	23132
		6.	2014-15	Redgram	90
Bengalgram	583			12	3498
Groundnut	14			4	70
Paddy	51			10	1530
Total	738			31	5413
7	2016-17	Redgram	100	6	500
8	2017-18	Bengalgram	2138	166	8548
Grand Total			29835	830	119135

Table 2
Economic Impact of Seed Village Programme on the farming community

Year	Crop	Variety	Quantity seed produced (qtl)	Area covered by quality seed for (ha)	Additional yield obtained by use of quality (qtl)	Additional income due to use of quality seed (Rs. In lakh)
2011-12	Redgram	TS-3R	850	6800	17000	510
	Paddy	GGV 05-01	3000	4800	12000	144
2012-13	Redgram	TS-3R	2848	22784	56960	1708
	Paddy	GGV 05-01	6730	10768	26920	323
2013-14	Redgram	TS-3R	8664	69312	173280	5198
	Paddy	GGV 05-01	11864	18982	47456	5694
	Greengram	BGS-9	350	2800	7000	210
2014-15	Redgram	TS-3R	315	2520	6300	189
	Bengalgram	JG11	3498	5597	8955	269
	Groundnut	K9	70	78	195	5.9
	Paddy	GGV 0501	1530	2448	6120	91.8
2016-17	Redgram	TS3R	500	4000	10000	300
2017-18	Bengalgram	JG11	4325	8650	26760	622
		GBM2	1985	3970	7940	238
		BGD103	2238	4476	8950	268

NEED FOR STRENGTHENING THE SEED VILLAGE

- In order to upgrade the quality of the seed produced at village level, there should be support for creation of seed infrastructure, like seed godowns, mobile seed processing units, improved storage facilities etc.,
- These villages needs to connected to regular seed programmes by both public and private seed sectors to procure back the excess quantity of quality seeds availability in the area.
- Linking of seed villages for other developmental schemes of the Govt. To enhance the per capita income of the farmers involved in seed production.
- The subsidies / other benefits of the government needs to be transferred directly to farmers so that farmers can have the liberty to use the resources based on his needs.



Figure 1: Distribution of foundation seeds to selected farmers under Seed Village Programme



Figure 2: View of the training of farmers on Quality Seed Production at village level



Figure 3: Monitoring of seed production plots by the expert

CONCLUSION

The public sector organization can adopt modified seed village programme under scientists/farmer participatory approach for in large scale spread of new high yielding and disease resistant varieties, to make the farmers more self sustainable with supply of quality seeds and generation of employment in the rural area.

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