

Success Story on Guar Production under RKVY

Madhya Pradesh

- 1. Title:-** Area Expansion under Guar Crop through Demonstration .
- 2. Category:-** Agriculture
- 3. Back ground & Challenges:-** The guar or cluster bean with the botanical name " Cyamopsis Tetragonoloba" , is an annual legume and the source of guar gum. It is also known as Gwar, Gavar, or Guvar bean. This legume is a very valuable plant within a crop rotation cycle, as it lives in symbiosis with nitrogen fixing bacteria. In fact in semi arid regions of Rajasthan, part of MP, agriculturists follow crop rotation and use guar as a source to replenish the soil with essential fertilizer and nitrogen fixation, before the next crop. Guar as a plant has a multitude of different functions for human and animal nutrition, but its gelling - agent containing seeds (Guar Gum) are today the most important use. The demand is rapidly increasing due to industrial use of guar gum in hydraulic fracturing (oil shale gas) . About 80% of production occurs in India and Pakistan.

In Madhya Pradesh it is grown in four districts namely Gwalior, Shivpuri, Morena and Bhind as a major crop. The current area under this crop is 2500, 3000, 3500 and 2100 Ha respectively. As the guar is a drought resistant and sun loving crop therefore farmers of these district grows



this crop. As the demand of guar gum is increasing day by day, it is becoming priority area to increase the area under this crop for meeting out future requirement. As it not considered as a major crop of the country therefore National Seed Corporation does not produces its seed in large quantity. In normal conditions farmers are using guar gum seed either purchased from private growers or self procured seed , which is comparatively giving much lower productivity as recommended by the researchers .

- 4. Initiative:-** The project related to demonstration of guar gum was initiated for sanction in the year 2013-14 and till than it is continuously being sanctioned in all the SLSC under RKVY. The details of projects sanctioned so far is as given below :-

Rs in Lakhs

S.No	Date of SLSC	Sanctioned cost of the project	Expenditure	No. of Demonstration laid out.
1	14.06.2013	100.00	24.80	1841
2	25.06.2014	78.13	0.00	0
3	15.05.2015	93.00	86.66	6756
4	24.04.2017	150.00	48.90	2456
	Total	421.13	160.36	11053

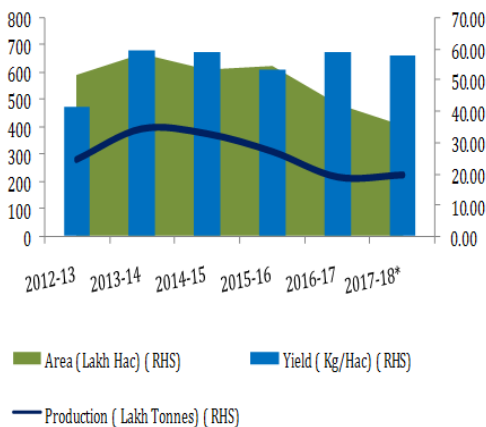
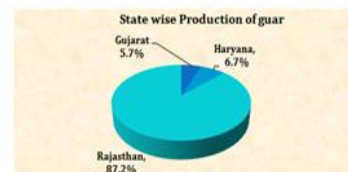
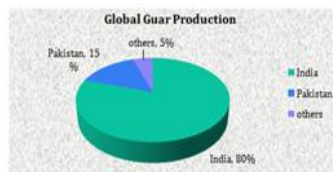
In each project the unit cost of the demonstration has been taken as Rs 2000/- per demonstration. Each demonstration contains 5 components such as cost of seed, cost of Gypsum, cost of micronutrients, cost of PP chemicals and Field day or Kisan Gosthi. The above expenditure and corresponding progress is much less than the sanction due to unavailability of seed in time.

4. **Key Result/ Insight /Interesting Facts:** - Guar is mainly produced in Rajasthan, Haryana and Gujarat, some area is also reported in Punjab and Uttar Pradesh. Madhya Pradesh has such a low area that even it is not counted as guar producing state. The Area, Production and Productivity of guar in all three major state is as given below :-

Area-000Ha, Production-000Mt, Productivity-Kg/Ha

State	Particulars	2009-10	2010-11	2011-12
Rajasthan	Area	2581	3001	3094
	Production	201	1546	1847
	Productivity	78	515	547
Haryana	Area	252	256	215
	Production	329	333	290
	Productivity	1305	1300	1350
Gujarat	Area	1327	1246	37
	Production	447	730	330
	Productivity	337	586	889
All India	Area	2996	3382	3444
	Production	595	1965	2218
	Productivity	198	581	157

The guar acreage for the year 2017-18 has come down to 35.41 lakh Ha which is the lowest in last six years coverage where as government advance estimate reports that Rajasthan government raised its production from 14.24 lakh Tonnes to 16.76 lakh tonnes during the year 2017-18. The global guar production and state wise production of guar is represented by the following pictures. This shows that India is the biggest producer of guar with 80% share, next comes Pakistan with 15% production share and rest 5 % comes from other countries. The area, production and Yield for Rajasthan and Haryana state from 2012-13 to 2017-18 have been given in the bar chart. The clear and authentic data for Madhya Pradesh is not available , whereas while preparing the project the district agriculture offices has provided the area covered under guar and accordingly the total area may vary from 15000 to 2000 Ha in the state.



5. Impact:-

6. Lesson Learnt:- This project was initiated because of heavy demand of public representative of the concerned districts. Normally one should have the base line data for all projects so that impact evaluation studies may be conducted by comparing the current data base with base line data. Similarly it has also learnt that the use of guar in Madhya Pradesh is not very common and attempt should also be made not only to increase the area and production but also to fulfill the demand of guar in the industries so that farmers can get a viable option of commercial crop.

7. Supporting Quotes and Images:-

8. Additional Information:- The contact address of the officer in-charge of implementing this project is as given below :-

Shri G. S. Chauhan , Joint Director Agriculture
4th Floor, Vindhyachal Bhawan, Bhopal
Phone :- 0755-2551281
Mobile - 9425135912