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A STUDY OF DISTRIBUTION OF CERTIFIED SEEDS BY BEEJ NIGAM
WITH SPECIAL REFERENCE TO RAIPUR DISTRICT OF CHHATTISGARH



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ABSTRACT:

Seed is considered to be the most important and vital input for the production of crops. It is one of the ways to increase and enhance the productivity of crops without adding appreciably to the extent of land that is under cultivation by planting quality seed. It becomes important to use quality seeds for better results. Chhattisgarh has 27 districts and total population of 25540196 out of which 80% of the population depends on agriculture. For the development of primary sector in the state a state level institution i.e. Beej Nigam was formed to ensure proper and timely

distribution of quality seeds to the farmers. This study focuses on the distribution of certified seeds by Beej Nigam in the last five years.

KEYWORDS

production of crops, Research Methodology, Beej Nigam.

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INTRODUCTION

OBJECTIVES OF STUDY

- 1.To find out the significance of Beej Nigam in distribution of certified seeds in Chhattisgarh.
- 2.To know about the problems and challenges faced by Beej Nigam in distribution of certified seeds.

HYPOTHESIS

- 1.Distribution of certified seeds by Beej Nigam is increasing in Chhattisgarh.
- 2.Improvement is needed in the distribution of certified seeds.

AREA AND PERIOD OF STUDY

This study is based on distribution of certified seeds by Beej Nigam in Chhattisgarh. To fulfill the object the study covers Raipur district of Chhattisgarh and the study includes the data of five years. Secondary data on distribution of certified seeds has been collected for last five years i.e. from 2009-10 to 2013-14. The area of study is Raipur district of Chhattisgarh state.

RESEARCH METHODOLOGY

The study is based on the primary data collected through interview schedules from 50 farmers of Raipur district and interviews of employees of Beej Nigam working at different levels. Secondary data published by the head office of Beej Nigam, journals, books, newspapers and internet.

SCOPE AND LIMITATIONS OF STUDY

- 1.The study is limited to the concept of distribution of certified seeds.
- 2.It study focuses on the performance of Beej Nigam from 2009-10 to 2013-14 i.e. 5 years.
- 3.It is applicable only to the state of Chhattisgarh.

INTRODUCTION TO BEEJ NIGAM

Beej Nigam is a company limited by shares incorporated in the year 2005 with main objective to produce and distribute certified seeds in Chhattisgarh. It also aims at promotion of all those activities which leads to development of agriculture in the state. Besides production and distribution of certified seeds it carries out all the activities that are essential for the development of allied sectors such as pisciculture, sericulture, horticulture and animal husbandry. As it is a newly formed institution it focuses on its main object of production and distribution of certified seeds, though it is carrying out its ancillary activities slowly.

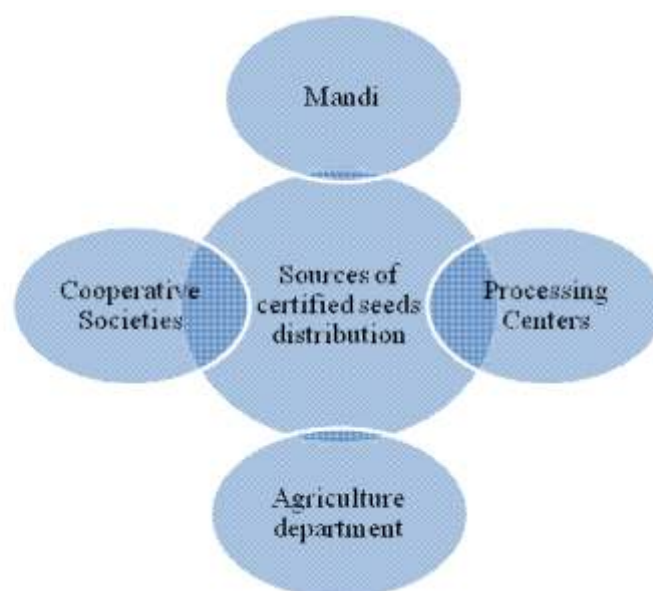
STEPS BEFORE DISTRIBUTION OF CERTIFIED SEEDS

Prior to distribution if rabi or kharif crops, demand is collected for the seeds. Collection of demand is done through cooperative societies established at block level. Demand of a district is collected by Senior Agriculture Development Officer. After collection of demand Beej Nigam starts the process of production of seeds. Certified seeds are produced in the farms of Beej Nigam where the registered seeds growers (seed growers that are registered under Beej Nigam and are provided training from time to time to grow certified seeds), under the supervision of officers from seed certifying agencies. After harvest these seeds are taken to the processing centers of Beej Nigam where they are cleaned and dried. Processed seeds are sent to certification agency for certification. The quantity that is passed by the certification agency is packed, sealed and tagged with a blue colour. Lastly these packed seeds are send to godowns where they are stored until distribution.

SOURCES OF DISTRIBUTION

After production the next most important task is distribution of certified seeds to farmers. For distribution of certified seeds Beej Nigam, with the help of Mandi, cooperative societies and Agriculture department accomplishes the task of seed distribution. Seeds are also distributed through processing of Beej Nigam. Farmers can easily get certified seeds from any of these sources. There is no facility of door to door service for seeds distribution. Farmers have to come to any of these four sources for buying certified seeds. Sources of distribution are presented in the diagram below.

Fig 1.1 Showing sources of distribution of certified seeds



DISTRIBUTION OF RABI AND KHARIF SEEDS

Beej Nigam provides certified seeds for both Rabi and Kharif crops. This part of study will deal

with demand and distribution of Rabi and Kharif seeds separately in the last five years i.e. from 2009-10 to 2013-14 in Raipur district as well as Chhattisgarh. Following table and graph shows the demand and distribution of Kharif seeds. It also shows the balance of seeds in cooperative societies, mandi, Agriculture department and processing centers of Beej Nigam.

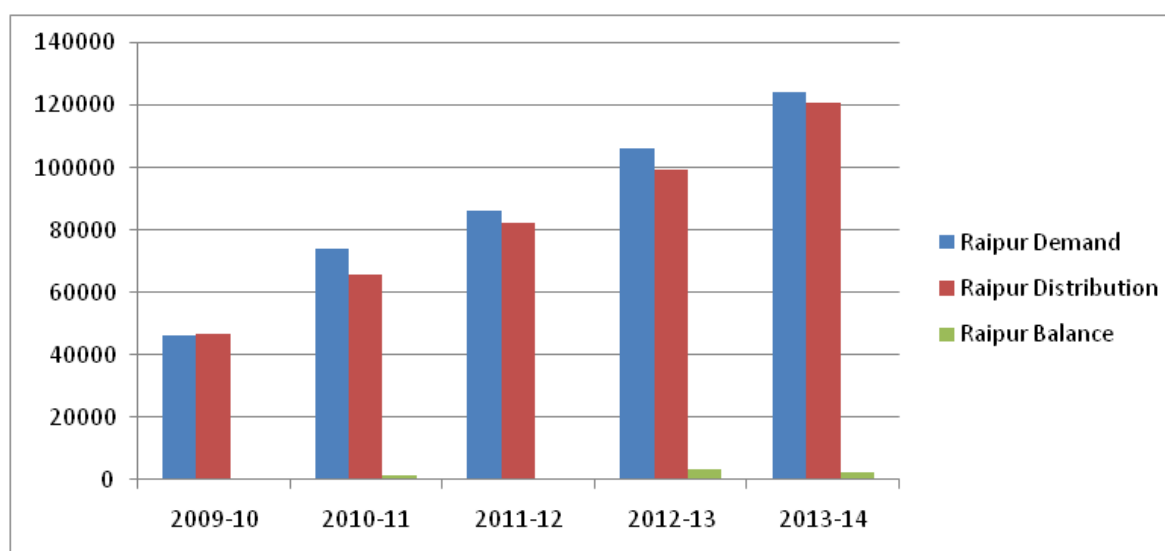
Table 1.1 showing Demand, Distribution and Remaining quantity of Kharif Seeds Qty in Quintals

Year	Raipur			% increase (+) or decrease (-)		Difference between distribution and demand
	Demand	Distribution	Balance	Demand	Distribution	
2009-10	46170	46670.9	87.48	-	-	500.9
2010-11	74180	66034.7	1318.22	(+) 60.67	(+) 41.49	(-) 8145.3
2011-12	86325	82291.6	282.7	(+) 16.37	(+) 24.62	(-) 4033.4
2012-13	106387	99652.7	3361.8	(+) 23.24	(+) 21.1	(-) 6734.3
2013-14	124160	120747.9	2495.13	(+)16.71	(+)21.17	(-)3412.1

Source: Head Office, Beej Nigam

Note 1. Figures of distribution in table 1.1 includes distribution through mandi, cooperative societies, Agriculture department and Processing centers of Beej Nigam

2. Figures of balance in table 1.1 includes distribution through mandi, cooperative societies, Agriculture department and Processing centers of Beej Nigam.



The above table and graph shows consistent increase in the demand of certified seeds of kharif crops in Raipur district. In the year 2009-10 the demand of certified seeds in Raipur district was 46170, 74180, 86325, 106387 and 124160 qtls respectively. In the year 2013-14 the demand increased by

168.92% as compared to 2009-10. From the year 2009-10 percentage increase in demand is not consistent. Though quantity demand increased in but the year 2010-11 there was 60.67% increase in demand where as in 2011-12 the demand increased but by less than half i.e. by 16.37%. In 2011-12 demand increased by 23.24% which is higher than the previous year. Again in 2013-14 demand increased but by 16.71% which is less than the previous year.

The quantity of Kharif seeds distributed also increased every year. As compared to 2009-10 there was 158.72% increase in quantity demanded as compared to 2013-14. Distribution since 2009-10 has continuously increased but the percentage increase is falling every year. In the year 2010-11 there was 41.49% increase in seeds distribution which shows a fall every year as it reduced to 24.62%, 21.1% and 21.17% respectively.

This fluctuation in demand and distribution is due to the fact that demand has not been collected properly. Secondly, annual rainfall keeps fluctuating every year and agriculture is largely affected by rainfall. Fluctuation in both demand and distribution is because of fluctuation in rainfall and demand being not collected properly.

Table 1.2 showing Demand, Distribution and Remaining quantity of Rabi Seeds

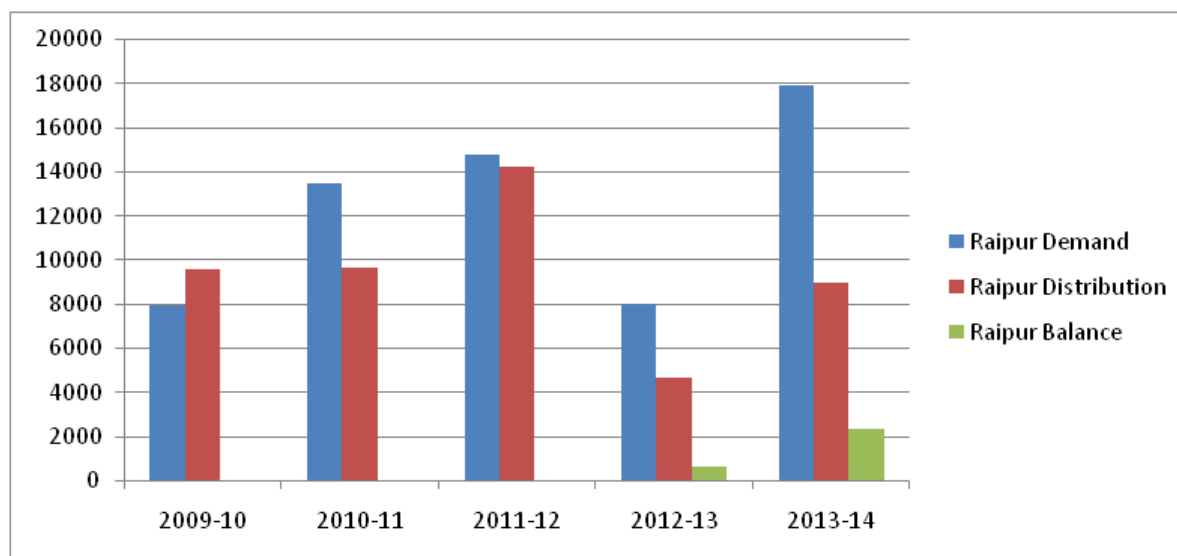
Qty in Quintals

Year	Raipur			% increase (+) or decrease (-)		Difference between distribution and demand
	Demand	Distribution	Balance	Demand	Distribution	
2009-10	7933	9560.59	1.4	-	-	1627.59
2010-11	13520	9632.95	0	(+) 70.42	(+) 0.76	(-) 3887.05
2011-12	14794	14215.6	14.37	(+) 9.4	(+) 47.57	(-)578.4
2012-13	7990	4633.95	609.65	(-) 45.99	(-) 67.40	(-) 3356.05
2013-14	17926	8953.74	2301.88	(+) 124.35	(+) 93.22	(-) 8972.26

Source: Head Office, Beej Nigam

Note 1. Figures of distribution in table 1.2 includes distribution through mandi, cooperative societies, Agriculture department and Processing centers of Beej Nigam

2. Figures of balance in table 1.2 includes distribution through mandi, cooperative societies, Agriculture department and Processing centers of Beej Nigam.



The above table and graph shows inconsistent increase in the demand of certified seeds in Raipur district as well as Chhattisgarh. In the year 2009-10 the demand of certified seeds of Rabi in Raipur district was 9560.59 qtls. In the year 2011-12 it increased to 14215.6 qtls which shows 48.68% increase in distribution of seeds as compared to 2009-10. From 2009-10 to 2011-12 the distribution shows consistency as the distribution in the year 2009-10, 2010-11 and 2011-12 was 9560.59, 9632.95 and 14215.6 respectively. In the next year i.e. in 2012-13 the distribution of seeds fell more than half of the quantity distributed in the previous year. This huge fall in the seeds distribution was due to the unfavourable climatic conditions in the state as the agriculture of Chhattisgarh largely depends on monsoons. Due to the situation of drought prevailing in this year, both production and distribution were adversely affected. In the year 2013-14 the distribution was more than double and the figures of distribution stood at 8953.74 which show an increase of 124.35% in demand and 93.22% increase in demand as compared to the previous year.

Despite the fact that distribution of seeds has been less than the quantity demanded in all these five years, except for the year 2009-10 where distribution was 1627.59 qtls more than demand, there still remains balance of seeds left undistributed in the processing centers, mandi, co-operative societies and agriculture department. In the year 2010-11 distribution was 3887.05 qtls less than the demand and no balance was left in any of the sources of distribution. In the next three years the quantity distributed was less than quantity demanded but balance of undistributed seeds kept on increasing in these years. Year 2013-14 showed the largest gap between demand and distribution where distribution was 8972.26 qtls less than the demand.

Data Analysis

Data was collected with the help of interview schedules from 50 farmers of Raipur district. Following are some important questions and their analysis.

S. No.	Particulars	Yes	No
1.	Do you use modern technique for farming?	23	27
2.	Do you take 2 crops in a year?	39	11
3	Do you use certified seeds?	22	28
4	Do you get assistance from Beej Nigam for buying seeds?	0	50
5	Do you know about functions of Beej Nigam other than providing certified seeds?	8	42
6	Do the officers of Beej Nigam visit your village?	36	14
7	Do you get seeds from Beej Nigam on time?	29	21
8	Is there any improvement in the quality of seeds after the formation of Beej Nigam?	39	11
9	Do you get the variety of seeds you demand from Beej Nigam?	37	13
10	Do you think Beej Nigam needs improvement?	42	08

PROBLEMS

- 1.Low literacy rate among the farmers makes it difficult for the employees of Beej Nigam to deal with them.
- 2.Lack of knowledge among farmers about modern techniques of farming.
- 3.Use of traditional methods of farming results in less production which affects the demand of certified seeds adversely.
- 4.Besides using traditional methods farmers take only one crop in a year, mostly Kharif due to which the demand and distribution of Rabi seeds are quite less as compared to Kharif.
- 5.Due to use of traditional methods of farming and lack of awareness about the benefits of cash crops farmers mainly take cereals and do not demand for cash crops. This results in very minimal production and distribution of certified seeds of cash crops.
- 6.Farmers are unaware about the benefits of using certified seeds for farming.
- 7.Farmers buy local and uncertified seeds because cost of uncertified seeds is less than the cost of certified. Thus buying uncertified seeds is economical for them.
- 8.Officers employed by Beej Nigam to work at the local level do not perform their duties sincerely as most of them do not visit the villages. They do not interact with farmers, not even once in a year.
- 9.Figures of demand collected from various sources by Beej Nigam are not actual figures by mere estimates.
- 10.Demands of seeds are uncertain and keep on fluctuating every year.
- 11.Agriculture of Chhattisgarh, to a large extent, depends on monsoons, which at times, adversely affects the production as well as the distribution of seeds.
- 12.Though the distribution is less than the demand still there are figures of balance remaining with Beej Nigam because the variety demanded by farmers is not provided to them. Farmers are not ready to buy certified seeds of quality other than what they have demand.
- 13.Sometimes the variety of certified seed of crop demanded by the farmers are not available with Beej Nigam and in that case the variety demanded is either arranged from processing centers of other districts, Seeds Corporations of other states or National Seed Corporation.
- 14.In case of shortage of seeds Beej Nigam purchases seeds from other sources like NSC or SSC leads to

increase in the cost of seeds.

15. Lot of precious and crucial days is wasted in transportation of certified seeds from the godowns of other districts, NSC and SSC.

16. Certified seeds brought from SSC of other state or NSC may not give better results as the geographical condition of other states are different from Chhattisgarh. Due to this germination and yield can be affected.

17. Time is the most important factor in agriculture. Due to unavailability of seeds on time farmers buy uncertified seeds from private or local distributors of seeds.

18. After the harvest of crops some seeds growers sell their seeds in mandi rather than selling it to Beej Nigam because of rate differences. This causes shortage of seeds in the respective godowns of Beej Nigam for distribution.

19. Prices of certified seeds are higher than that of uncertified seeds. In spite of this Beej Nigam does not provide the farmers with any subsidy on seeds due to which they lose interest in buying certified seeds produced by Beej Nigam.

20. Beej Nigam does not provide farmers any kind of assistance or loans at concessional rates for buying certified seeds.

21. There are farmers who are completely unaware of the existence of an institution called Beej Nigam.

SUGGESTIONS

1. Employees of Beej Nigam must take the help of 'Gram Sevak'. This will help the farmers as well as the employees of Beej Nigam easier to deal with each other.

2. Farmers must be made aware of the modern methods of farming and its benefits. They must also be provided with financial support to buy modern equipments.

3. Rather than simply concentrating on production and distribution of seeds Beej Nigam must also provide training and create awareness about modern methods of farming.

4. Farmers of Chhattisgarh mainly choose to grow paddy as the yield of paddy is good. But farmers who take single crop in a year should also be encouraged by Beej Nigam to take Rabi crops which will create a balance and also help to increase the annual income of farmers.

5. Farmers must be made aware of the benefit of growing cash crops and they must be encouraged to take crops other than cereals.

6. With the help of 'Gram Sewaks' Beej Nigam must make the farmers about the positive aspects of using certified seeds and encourage them to buy certified seeds.

7. Though it is not possible for Beej Nigam alone to bring the rates of certified seeds at par with that of uncertified seeds but it can try to reduce the cost of seeds to minimum.

8. Senior officers of Beej Nigam must ensure that the junior officer employed to work at village level must perform their duties sincerely because they are the actual executors of the policies framed by the higher authorities.

9. Problems arise because officers responsible to collect the demand at these sources do not visit villages and project estimated figures of demand and not the actual one. They must project the figures of demand after a survey in their respective areas.

10. Uncertainty of demand is due to the fact that farmers keep on changing the variety that they grow. This uncertainty can be reduced by educating the farmers about the varieties they should use to get

better yield.

11. Dependency on monsoons can be reduced by using sources of irrigation other than rains. This will, to some extent, reduce risk factor in agriculture and production and distribution of seeds will be better and smoother.

12. In order to reduce the balance quantity of seeds left with Beej Nigam the demand, from farmers, must be collected carefully keeping into consideration the variety of crops that they demand. Demanded variety must be produced and distributed by Beej Nigam.

13. Beej Nigam must ensure that the varieties of crops demanded by farmers are provided to them by properly collecting demand from farmers on time and producing the same.

14. Rather than purchasing seeds from NSC or SSC and distributing those at higher rates seeds must be produced by Beej Nigam.

15. Proper collection of demand and timely purchase of the demanded variety of seeds will save valuable time during the crop season and ensure distribution of seeds in time.

16. For better yield certified seeds must be produced by Beej Nigam in its registered farms.

17. To ensure timely distribution of seeds Beej Nigam must produce the seeds, process it and store it properly in the godowns near by the area where they are to be distributed.

18. Rates of seeds at which Beej Nigam buys it must be fixed higher or closer to the market rates so that seed growers need not search for other avenues to sell seeds.

19. Beej Nigam should provide certified seeds to the farmers at subsidized rates in order to reduce the gap between rates of certified and uncertified seeds. This step will encourage farmers to buy certified seeds.

20. Loan facility must be provided by Beej Nigam to farmers for buying seeds at least in the initial years to encourage them to buy and use certified seeds.

21. "Jo dikhta hai wo bikta hai". These lines hold true in this era of advertisement. Beej Nigam must use print, electronic and other modes of publicity to make people know about its existence

22. Beej Nigam must also advertize its work. Earlier it was done through print media which is beyond the reach of framers due to low literacy rate. Modes of advertisement should be Electronic media using radios or door to door or mouth to mouth publicity.

23. For the overall development of Beej Nigam PPP (Public Private Partnership) Model can be followed so that new techniques, funds, efficiency and improvement in the quality of product.

CONCLUSION

Beej Nigam, undoubtedly, is playing a vital role in the development of agriculture sector of Chhattisgarh by producing and distributing certified seeds to the farmers of the state. Both in Rabi and Kharif crops the quantity distributed to the farmers have increasing in the last five years except for a few exceptions. Despite this there are several avenues where Beej Nigam needs improvement especially in the distribution of Rabi crops, cash crops and vegetables. Beej Nigam will be able to fulfill its main objectives, with which it was formed, by improving the quality of its work.

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