

# Constraints and Suggestions of the Bengalgram Farmers in Prakasam District of Andhra Pradesh

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#### **ABSTRACT**

The study revealed that the important constraints were lack of information on relative performance of high yielding varieties, non-availability of fertilizers in time, high cost of pesticides, non-availability of harvesting equipments and lack of knowledge about storage pests. Important suggestions to overcome the constraints were providing fertilizers and seeds timely on subsidized rates, provision of timely credit facility, provision of support price to bengalgram and provision of good marketing facilities.

**Key words:** Bengalgram farmers, Constraints.

Bengalgram is the most important pulse crop in India. It occupies about 7.58 million hectares, with production of 6.91 million tonnes. The main bengalgram producing states in India are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Andhra Pradesh and Karnataka. Bengalgram is mostly grown in the districts of Prakasam, Adilabad, Nizamabad, Rangareddy, Medak and Guntur. Though the area under bengalgram is more we could not meet the demand of people due to low production and productivity. Bengalgram yields have remained stagnant over a long time. Still there is big gap between achievable yields and achieved yields. This is mainly due to the fact that bengalgram is being mostly grown in traditional way by the majority of the farmers.

In Prakasam district bengalgram is the main crop. Though the area under bengalgram is constantly increasing in the district, productivity levels are not increased and here is a need to address this problem. Keeping this in view the present study was undertaken to know the constraints faced by the bengalgram farmers and suggestions to overcome them in Prakasam district of Andhra Pradesh.

### MATERIAL AND METHODS

The study was conducted with an expostfacto research design to assess profile characteristics of bengalgram farmers in Prakasam district of Andhra Pradesh state. Prakasam district was purposively selected because of its largest area,

production and productivity under bengalgram crop in coastal districts of Andhra Pradesh. Out of three revenue divisions in the Prakasam district, Ongole revenue division was selected purposively because of highest acreage of bengalgram crop in the district. Out of 20 mandals in Ongole revenue division, five mandals namely Parchur, Inkollu, Korisapadu, Nagulauppalapadu, and Ongole were selected by following random sampling method. Three villages from each of the selected mandals were selected by following simple random sampling procedure, thus making a total of 15 villages. A total sample of 120 bengalgram growers were selected by selecting eight farmers from each village by simple random sampling procedure. The data were collected through well structured pretested interview schedule, which was coded, tabulated, analysed and presented in tables to make the findings are meaningful and easily understandable. Various statistical measures such as frequency, percentage, mean and standard deviation were used. The findings were suitably interpreted and necessary conclusions and interferences were drawn.

# RESULTS AND DISCUSSION

# 1. Constraints in adoption of recommended practices as perceived by farmers Land preparation and sowing

The data in table 1 revealed that in case of land preparation and sowing, lack of information on relative performance of high yielding varieties

(87.50%) was the major constraint followed by higher cost of improved / high yielding bengalgram seed (76.66%), non-availability of seed in time (65.00%), non-availability of chemical/culture for seed treatment (51.66%), higher cost of field preparation(38.33%), lack of knowledge about suitable soils for bengalgram cultivation (18.33%) and non-availability of labour at sowing time (15.00%) were the constraints in order of their importance. So sufficient technical staff is needed to guide the farmers about high yielding varieties at the time of beginning of crop season. Extension functionaries have to educate the farmers about package of practices of bengalgram through training programmes and various extension activities such as group discussion, field visits etc. This finding was in tune with the findings of Badodia et.al.(2006) and Royburman et.al. (2006).

# Fertilizer application

It was evident from the Table 1 clearly indicate that, in case of fertilizer application non-availability of fertilizers in time (81.66%) was the major constraint followed by lack of knowledge (63.33%) and high cost of fertilizer (46.66%). The traders also sometimes created artificial stock deficit, which made the farmers to perceive this problem. Steps should be taken by the government to provide sufficient fertilizers on subsidized rates, and posting of sufficient technical staff needed to guide the bengalgram farmers on package of practices. This finding was inline with Gopinath (2005).

# Plant protection measures

It is clear from table 1 reveals that, with respect to plant protection measures, high cost of pesticides (85.00%) was the major constraint followed by pesticides are not available in time (73.33%), lack of knowledge on dosage (55.00%), and lack of knowledge on quality and pesticide of different brands (35.83%) respectively as constraints in order of their importance. Steps should be taken by the government to provide sufficient timely and easily available plant protection chemicals to the farmers, availability of inputs is a critical factor for adoption.

### Mechanization

A cursory look from Table 1 revealed that in case of mechanization, non-availability of harvesting equipments (90.00%) was the major constraint followed by high cost of machinery for small and marginal farmers (78.33%), non-availability of threshing equipments (65.00%), non-availability of spraying equipments (52.50%) and non-availability of sowing equipments (20.83%) as the other constraints in order of their importance. Steps should be taken by the government to provide various machinery to the small and marginal farmers with subsidiary rates.

## Storage and marketing

It was asserted from the results in the Table 1 revealed that with regard to storage and marketing, lack of knowledge about storage pests (71.66%) was the major constraint followed by lack of knowledge about market price (65.00%), transportation facilities are not good (43.33%), and lack of proper storage facilities (29.16%) were the other constraints. The Government of Andhra Pradesh should provide sufficient staff to create awareness on storage pests, and construct godowns for storage of the produce. There are sufficient private coldstorages available to the farmers, but they had taken extra charges and there is no guarantee to their produce and the government should give the information about market price, and it is better to increase the support price to bengalgram. Then only farmers adopt the new technologies in their fields.

### Other constraints

It was evident from Table 1 indicated that other constraints include lack of credit capital at proper time (80.83%) was the major constraint followed by agricultural training/ demonstrations not organized (73.33%), marketing facilities not available at proper place (62.50%) and grazing problem (10.00%) were the other constraints. The farmers had to depend on private money lenders for ready credit at the time of purchase of inputs, there was no institutional credit. So they felt lack of credit facilities as a major problem. The Government should give timely credit support

Table 1. Constraints faced by the farmers in bengalgram cultivation.

(n=120)

S.no	Constraints	Frequency	Percentage	Ranl	
1.	Land preparation and sowing				
a.	Lack of knowledge about suitable soils for	22	18.33	VI	
	bengalgram cultivation				
b.	Higher cost of field preparation	46	38.33	V	
c.	Non-availability of seed in time	78	65.00	III	
d.	Higher cost of improved / high yielding bengalgram seed	92	76.66	II	
e.	Lack of information on relative performance of high yielding varieties	105	87.50	Ι	
f. g.	Non-availability of chemical / culture for seed treatment	62	51.66	IV	
	Non-availability of labour at sowing time	18	15.00	VII	
2 a.	Fertilizer application				
	High cost of fertilizers	56	46.66	III	
b.	Non-availability of fertilizers in time	98	81.66	I	
. c.	Lack of knowledge	76	63.33	II	
3.	Plant protection measures				
a.	Pesticides are not available in time	88	73.33	II	
b.	High cost of pesticides	102	85.00	I	
c.	Lack of knowledge on dosage	66	55.00	III	
d.	Lack of knowledge on quality and pesticide of different brands	43	35.83	IV	
4.	Mechanization				
a.	Non-availability of sowing equipments	25	20.83	V	
b.	Non-availability of harvesting equipments	108	90.00	I	
c.	Non-availability of threshing equipments	78	65.00	III	
d. e.	Non-availability of spraying equipments	63	52.50	IV	
	High cost of machinery for small and marginal farmers	94	78.33	II	
5.	Storage and marketing				
a.	Lack of proper storage facilities	35	29.16	IV	
b.	Lack of knowledge about storage pests	86	71.66	I	
c.	Transportation facilities are not good	52	43.33	III	
d.	Lack of knowledge about market price	78	65.00	II	
6.	Other constraints				
a.	Lack of credit capital at proper time	97	80.83	I	
b.	Agricultural training / demonstrations not organized	88	73.33	II	
c.	Marketing facilities not available at proper place	75	62.50	III	
d.	Grazing problem	12	10.00	IV	

Table 2. Suggestions given by the farmers for better adoption of recommended Package of practices of bengalgram.

(n=120)

S.No	Suggestions	Frequency	Percentage	Rank
1	Provision of good marketing facilities	70	58.33	V
2	Provision of timely credit facility	94	78.33	II
3	Organisation of training progammes on various aspects of bengalgram cultivation	52	43.33	VIII
4	Provision of support price to bengalgram	78	65.00	IV
5	Provision of effective plant protection chemicals	44	36.66	IX
6	Providing fertilizers and seeds timely on subsidized rates	103	85.83	I
7	Timely technical guidance to the bengalgram farmers	59	49.16	VII
8	Provision of harvesting equipments	87	72.50	III
9	Implementation of crop insurance scheme	65	54.16	VI
10	Provision of loan at lower interest	36	30.00	X

through banks, and give training to the farmers on various aspects on bengalgram crop, provide good marketing facilities by giving more support price and buy their product directly without interaction of middlemen. The finding was inline with Gopinath (2005).

# 2. Suggestions given by the farmers for better adoption of recommended Package of practices of bengalgram

Bengalgram farmers were asked to make suggestions to overcome the problems in adoption of recommended practices. The suggestions along with their ranks are given in table2.

It could be observed from Table 2 that providing seeds and fertilizers timely on subsidized rates (85.83%) was foremost one followed by provision of timely credit facility (78.33%), provision of harvesting equipments (72.50%), provision of support price to bengalgram (65.00%), provision of good marketing facilities (58.33%), implementation of crop insurance scheme (54.16%), timely technical guidance to the bengalgram farmers (49.16%), organization of training programmes on various aspects of bengalgram cultivation

(43.33%), Provision of effective plant protection chemicals (36.66%) and provision of loan at lower interest (30.00%) of their importance as perceived by the bengalgram farmers. Thus, it is the responsibility of the Government, Extension agency and research institutions to provide the above suggested facilities to the farmers for better adoption of bengalgram production recommendations. These findings were in line with Gopinath (2005).

# LITERATURE CITED

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