



# Krishi Vigyan Kendra, Badnapur Dist. Jalna



## 1. Outreach extension programmes and the number farmers connected.

Sr.No.	Outreach Extension Programmes	No.of Programmes	No.of Farmers connected
1.	Training Programmes	170	7030
2.	OFT	15	150
3.	FLDs	16	160
4.	Field Visits	100	2154
5.	Diagnostic Visits	30	214
6.	Workshops	2	412
7.	Agricultural Exhibitions / Kisan Mela	08	2400
8.	Special Campaigns	24	500
9.	Farmer Scientist Interaction Programmes	12	1350
10.	Use of Mass Media		
	Facebook	56	921
	Youtube	80	400
	Instagram	--	--
	Twitter	845	985
	Blogspot	---	---
	Whatsapp	02	Approx. 25000
11.	Plant/animal health camps	2	45
12.	Group discussions	55	660
13.	Farmers visited to KVK	300	650
14.	Exposure visits of farmers	---	---
15.	Supply of Agricultural inputs	-	-
	Biomix	1250 liters	1585
	Biofertilizers (Metarizium, Tricoderma)	850 liters	965
16.	Ongoing Project		
	1. Special Project on Cotton	1	217

## 2. Performance of Krishi Vigyan Kendras under the university.

Sr.No.	Particulars	No. of Prorammes	Targets	Achievement	No. of Farmers
Scientific Intervention through OFT, FLD & CFLD					
1	On Farm Trials (OFT)	15	12	15	150
2	Front Line Demonstration (FLD)	16	12	16	160
3	Cluster Front Line Demonstrations (O & P)	04	125	04	125

Training Programmes for Skill Impartment					
1	Practicing Farmers / Farm Women (PF)	110	3000	145	5200
2	Rural Youth (RY)	30	750	40	1080
3	Extension Functionaries (EF)	30	750	31	750
Major Extension Activities & Outreach Programmes					
1	Extension Activities (Major)	125	7500	142	9500
	Total	330	12435	393	16965

### 2.1 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)

Sl. No.	Bio Products	Name of the Product	Qty (kg/lit)	Gross income	
1.	Biomix	Biomix	1250 lit	Rs.2,62,500/-	1250 farmers
2.	Bio- pesticides	Trichoderma viridie, Trichoderma hargemium, Metarhizium,	850 lit	Rs.1,78,500/-	850 farmers
		Total	2100 lit	4,41,000/-	

### 2.2 Status of revolving fund (Rs. in lakh)

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April
April 2024 to March 2025	276574	1360492	49490	1587576

### 2.3 Impact of KVK activities

Name of the specific technology / skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Pigeon pea Improved Variety (BDN711)	250	85	57937 per ha	Rs 70812 per ha
Backyard Poultry	50	55	2500/- per month	6500 to 10000 /- per month
Intercropping (Soybean + Pigeon pea)	45	48	22000	32000
DHN-6 Fodder	45	65	300	350

## 2.4 Adaption and performance of Pigeon pea BDN-711

Before organizing demonstration, a critical technology gap analysis was made by conducting farmers meeting and training well in advance. It was realized that Pigeon pea yield is low due to wilting and pod borer incidence. Farmers were normally growing local wilt susceptible variety. Many farmers in rainfed areas are often growing varieties by virtue of their conviction. These varieties are not able to fit in the growing environment. Sometimes varieties normally recommended for given region are not performing well because of rainfall aberrations particularly with dry spell in their growth periods. Keeping this situation in view, demonstration of location specific best varieties was organized on 20 ha area with benefiting 50 farmer's in Jalna district.

Performance of Short duration and Drought tolerant varieties of Pigeon pea BDN-711 because of this variety Matures in 150 to 155 days, drought tolerant, and escaped terminal moisture stress. Pigeon pea BDN-711 gave an average of higher seed yield by 26.2 q/ha with higher net return Rs. 138500 as compared to local variety 22.15 q/ha with net return Rs. 114225

Effort can be made to promote drought tolerant on large scale in district by encouraging seed production through seed village concept, National seed corporation State seed cooperation seed production and also private agencies for stable production and profitability. Linkage with concerned state Agricultural Universities need to be developed by respective KVK and other seed development agencies to produce breeder and foundation seeds for large scale production of certified seed

For adaption of BDN-711 among farmers on large scale in district KVK Jalna-II worked on different agencies, conducted training programmes, massive extension activities. From these efforts in kharif season 2020 Pigeon pea BDN-711 spread on 3860 ha including 6230 farmers.

### Economics of Pigeon pea crop

<b>Particulars</b>	<b>Yield (q/ha)</b>	<b>Gross Cultivation (Rs/ha)</b>	<b>Gross Return (Rs/ha)</b>	<b>Net Returns (Rs/ha)</b>	<b>B:C Ratio (Rs/ha)</b>
Farmers Practice	22.15	29750	143975	114225	1:4.83
Technology demonstration	26.20	31800	170300	138500	1:5.35

## 2.5. Impact of Special Project on Cotton (Technology targeting agro-ecological zones - large scale demonstrations of best practices to enhance cotton productivity)

**Introduction:** Special Project on Cotton was implemented by KVK, Jalna -II under the guidance and financial support from ICAR-CICR, Nagpur. In Jalna II district Cotton is the major crop. But the productivity and production of the district is very low. By considering this problem ICAR-CICR, Nagpur offered this project to KVK Badnapur (Jalna II) with an objective of increase the productivity of cotton by introduction of improved cotton cultivation practices in the district. With this broad objective this project was implemented in the district since 2023 by KVK Badnapur (Jalna II). In this project Closer Spacing, HDPS cultivation methods were introduced among the farmers. Various extension programmes namely, trainings, workshops, awareness programmes, field days, kisan melas were organized to disseminate these technologies among the farmers in the district. Finally since last two years we found very productive results in cotton production and productivity and farmers were also very satisfied and most of the farmers were decided to remain continue to adopt these technologies. Table shown below the details of the project and also horizontal spread of this technology among the farmers.

### Brief Information about Special Cotton Project implemented in the district.

Sr.No.	Particulars	2023-24	2024-25
1	Total Farmers / beneficiaries	33	217
2	Total area	37.5 ha.	130.6 ha.
3	Total tehsils covered	04	04
4	Total villages covered	17	38
5	Total Extension programmes organized	11	11
6	Average Production (Qtl/Acre) by improved method	16.45	17.25
7	Average Production (Qtl/Acre) by traditional method	07.5	9.00
8	% Increase over traditional method	61.32	62.50
9	Cultivation Technology	Closer Spacing Cultivation Technology (Dada Lad Technology)	Closer Spacing with Dada Lad technology, Closer Spacing with Chamatkar Spray & HDPS

From the above table it was observed that, in 2023-24 there were 33 farmers were adopted this technology with 93.75 acre area. But due to the good result in the 2023-24 the number of farmers and area under this technology was increased to 184 and 232.75 acre, respectively. In addition to this number of villages covered was increased from 17 in 2023-24 to 38 in 2024-25.

**Results :**

<b>Sr.No</b>	<b>Particulars</b>	<b>Year</b>	<b>Traditional method</b>	<b>Improved methods</b>	<b>Increase</b>	<b>% Increases / Decreases</b>
1.	Average Production (Qtl/Acre)	2023-24	07.5	16.45	8.95 Qtl	61.32 increase
		2024-25	9	17.25	8.25 Qtl	62.50 increase
2.	Average Cost of Cultivation (Rs./Acre)	2023-24	27938	28622	Rs. 684	02.44 increase
		2024-25	-	-	-	-

As shown in the table, it was revealed that, in 2023-23 average production was 07.5 qtl / acre in traditional method whereas 16.45 Qtl / acre in improved cultivation methods which was 61.32 % more than traditional method of cotton cultivation. Similarly, in 2024-25 it was found that average production was 9 Qtl /acre in traditional method whereas 17.25 Qtl / acre in improved cultivation methods which was 62.50 % more than traditional method of cotton cultivation.

## 2.6 . Case Study / Success Stories

### **Success Story-1: Effective implementation of closer spacing in cotton increased farmers' income**



**Shri.Sominath Sudhakar Awghad**

Name of Farmer-Shri.Sominath Sudhakar Awghad

Village- Wakulni

Taluka - Badnapur

District - Jalna

#### **Introduction**

Shri.Sominath Sudhakar Awghad from village-Wakulni District-Jalna cluster Badnapur having 4 Acre of land under special cotton project. He adopted Closer Spacing in cotton.

#### **Training and Guidance of KVK-**

KVK,Badnapur (Jalna-II) given training on Closer Spacing (Dada Lad Technology)in cotton crop. The technological inputs, guidance, advisory services given by KVK and ICAR-CICR, Nagpur to Shri.Sominath Awghad could boost his confidence to follow CS in cotton. Timeliness of cultural operation in cotton cultivation with proper guidance resulted in better cotton growth on the whole.

#### **Practices Adopted-**

With NCS 858, Bahubali variety, cotton was sown at 90 x 30 cm spacing on 12<sup>th</sup> June, 2024. For canopy management he had cut the monopodial branches of cotton crop at 40 days after sowing (DAS) with the help of secatauer. Moreover, he also followed the recommended the package of practices for nutrient and water management. Timeliness in pest management and need based plant protection measures could save his crop from yield losses.

- Crop was sown at 90 x 30 cm spacing
- For canopy management he had cut the monopodial branches of cotton crop at 40 days after sowing (DAS) with the help of secatauer.
- Each plant bear average 22 bolls.
- Average Boll weight of 6.4 g per boll.

Shri.Sominath Sudhakar Awghad anticipates a very high seed cotton yield of about 20.80 quintals per acre. The impact of Closer Spacing demonstrations is quite note worthy that viz., Use of cutting of monopodial branches, micronutrient, recommended dose of fertilizers and pesticides effectively integrated into a technological package could double cotton production.

**Impact of CS:** Closer Spacing (CS) in cotton facilitated uniform growth of plants. In addition, it became easier to provide the necessary nutrients by using recommended spacing of 90x30cm. In the very first year of the special project, he could harvest a bumper seed cotton yield of 20.8 quintals/acre and set a benchmark for other farmers to look upon.

**Success story-2: A short-duration hybrid with closer spacing improves the productivity of the Cotton-Wheat system**

Cotton farmer Shri. Krushna Sudamrao Kanhere from Georai Bajar village of Jalna district Gujarat adopted closer spacing in cotton on medium deep soil. In Maharashtra state, majority farmers on medium deep soil grow cotton under wider spacing (120-150 cm x 45-60 cm). Wider crop geometry could accommodate only 5555 to 8888 cotton plants per acre which results in low cotton productivity.

Under special project on cotton, closer spacing technological intervention in Jalna district of Maharashtra was demonstrated using Kabaddi cotton hybrid where in cotton was sown manually at crop geometry of 90 cm x 30 cm. As the cotton crop was grown under closer spacing slightly higher seed rate of cotton i.e. 4 packet per acre was used. Closer spacing was found ideal in terms of maintaining a better crop stand of 14,814 cotton plants per acre. Better natural resource utilization under closer spacing in cotton boosted cotton yield by double over the conventional farmers practice.

The cotton crop matures early and in three pickings 19.15 quintals of seed cotton was harvested from one acre of land. Due to early crop maturity and harvest of cotton crop the pink bollworm attack was almost negligible and he could harvest good quality cotton. Subsequently, he could take a second crop of wheat that will add to his income from same piece of land. A farmers field day Programme was organized on his field which was attended by more than 54 farmers.



**Shri. Krushna Sudamrao Kanhere**

**Success story-3: A Special Project boosts seed cotton yield for farmers in Badnapur,  
Jalna, Maharashtra.**



**Shri.Ashok Vithoba Sirsat**

Shri.Ashok Vithoba Sirsat is a resident of Walha Village, Badnapur Cluster, Jalna District of Maharashtra State. he associated with farming cotton for a while. His land was well irrigated and witnessed reduction in yield of Bt cotton due to infestation of pink bollworm in the last 2 to 3 years. he cultivated cotton over 1.5 acre area under special project on cotton 2024-25.

To manage the pest and diseases in cotton, he relied more on chemical sprays which lead to increased cost of cultivation this resulted in lower profitability in cotton in 2023, he cultivated cotton crop over the same area with technical guidance and motivation from Project coordinator of KVK,Jalna-II for Maharashtra. he monitoring of pink bollworm in cotton, pheromone traps were installed and field infestations were noted periodically. he followed the pink bollworm management strategies such using closer planting system (90 cm x 30 cm), installation of pheromone traps, spraying of major and micronutrients, micoriza. he got the opportunity to participate in the Pilot Special Project on Cotton. Under this project, KVK,Jalna-II Project Coordinator, Project Officer, ICAR-CICR regularly provided the guidance during the entire crop season, training and participatory field visits for identification of insects were carried out For detopping in cotton. Improved cotton technologies could reduce the cost of cultivation than previous year of project implementation and resulted in more profitability with seed cotton yield of 18 quintals per acre. The extent of yield improvement due to special project implementation to double over last year cotton harvest.

**Success story- 4: Implementing closer spacing in cotton on medium soil in Jalna, Maharashtra enhances the livelihood of cotton farmers**



**Shri.Vitthal Maroti Vaidya**

Shri.Vitthal Maroti Vaidya from Kusali village of Jalna district is a cotton farmer and he used sowing of cotton by conventional method with wider spacing of 120 cm x 60 cm. he used to harvest a seed cotton yield of 8 quintal per acre. This year with technological assistance from KVK, Jalna-II he sown Mahagun cotton hybrid. He adopted closer spacing intervention under special project on cotton and planted cotton at closer spacing of 90 cm ×30 cm. The seed required for cotton sowing was slightly higher i.e. 4 packet per acre. The cotton was sown on medium deep soil. The crop was grown under rainfed condition, however during boll development stage to mitigate the drought stress the farmer has given one-two life saving irrigation to the crop. The technology of growing cotton by following closer spacing in medium soil proved better than conventional crop. According to famers that, this technology is helpful for medium and light soil also where we can accommodate higher plant population. The scientists from ICAR-CICR, Nagpur have provided technical know how about canopy management by cutting monopodial branches of cotton crop at the 35-45 DAS. This could arrest the excessive growth monopodial branches of cotton crops as a result observed that more energy and nutrients was diverted towards development of cotton bolls rather than the monopodial branches. The canopy management in cotton increased the boll weight strikingly which helps in boosting cotton yield. Farmer could harvest a better cotton yield of 17 quintal seed cotton in one acre which is higher by 8 q/acre. The increase seed cotton yield by double over the conventional cotton practice. The farmer now doing lot of farmers led extension in the Jalna district.

## 2.7 On going Project Information :

Information of various projects implemented in the 2024 by KVK Badnapur (Jalna II)

### 2.7.1 Special Project on Cotton (Technology targeting agro-ecological zones - large scale demonstrations of best practices to enhance cotton productivity)

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### **2.7.2 Dr. Punjabrao Deshmukh Natural / Organic Farming Project**

- This project is sanctioned by Dr. Punjabrao Deshmukh Organic mission, Akola through ATARI Pune for promotion of natural farming in the district. Training programme, extension activities, organic input culture center, 10 drum theory demo unit etc. established at KVK for demonstration purpose to farming community.

### **2.8 Achievements in 2024:**

- Three contact farmers of KVK Badnapur (Jalna II) were awarded with various State Level Awards by Ministry of Agriculture, Government of Maharashtra.
- Two contact farmers of KVK Badnapur (Jalna II) were awarded with “Millionaire Farmer of District” award at New Delhi from Krishi Jagaran Group and IARI, New Delhi.
- Five contact farmers of KVK Badnapur (Jalna II) were awarded with “Yuva Shetkari Sanman” by Agroown Group.
- Ten contact farmers of KVK Badnapur (Jalna II) were felicitated by giving appreciation certificate from VNMKV, Parbhani.
- Successfully implemented Special Project on Cotton in the district. Total number of beneficiaries were increased from 33 in 2023-24 to 217 in 2024-25 under this project.
- Sold 1250 liter VNMKV, Biomix to 1250 farmers which helped to generate revenue of Rs.2,62,500/-
- Sold 850 liter Biopesticides to 850 farmers which helped to generate revenue of Rs.1,78,500/-