

### 3. TECHNICAL ACHIEVEMENTS

#### 3.A. Details of target and achievements of mandatory activities by KVK during 2007-08

OFT(Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
02	02	10	10	09	06	177	136

Training					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Cliente	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmer	36	42	1226	1185	09	608	1265	3470
Rural youth	11	13	310	304				
Extn. Functionaries	11	--	346					

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Soyabean(JS 335, MAUS 71) - 15	---	Mango(Kesher) - 4000	5500
Red Gram (BSMR 853, BDN 708) - 05	---	Fig(Poona, Dinkar) - 3000	3500
Greengram (BPMR-145) - 05	---	Anola(N.A.07) - 2500	1000
		Curry leaves(Sugandha) - 700	500
		Guava (L-49) - 500	300
		Pomegranet( Ganesh) - 500	250

### 3.B. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Varital evaluation	Soyabean	Low yield due to shattering	--	Varital MAUS-81	Seed treatment & Fertilizer Management in Soyabean	Seed treatment & Fertilizer Management in Soyabean	Field day, Kisan Melawa, Agri. Exhibition	MAUS-81
2	Varital evaluation	Red gram	Low yield due to local seed	--	Varital BDN-708	Red gram production technology	--	Field day, Kisan Melawa, Agri. Exhibition	BDN-708
3	Nutrient Management	Cotton	Low yield of Cotton due to inadequate Nutrient Supply.	Nutrient Management in Bt Cotton	--	Bt Cotton Production Technology	Bt Cotton Production Technology	Field day, Kisan Melawa, Agri. Exhibition, Training, Diagnostic Visit	Fertilizers, Micro Nutrients, Bio-fertilizers & Soil Testing
4	Integrated Crop Management	Cotton	Low yield of Cotton	--	Production technology	Cotton production technology	Cotton production technology	Field day, Kisan Melawa, Agri. Exhibition	Biofertilizers, biopesticides, seed (PA-402), etc.
5	Integrated Diseases Management	Sweet Orange	Low yield due to Dieback and Gummosis	Control of Dieback and Gummosis in Sweet Orange	--	Management of Dieback and Gummosis in Citrus crops.	Management of Dieback and Gummosis in Citrus crops. Rejuvenation of Old Orchards	Field day, Kisan Melawa, Agri. Exhibition	Fungicides and Bio-fertilisers

06	Nutrient Management	Chilli	Low yield due to inadequate supply of nutrients.	--	Nutrient Management in Chilli	Plant Protection in Chilli. Nutrient Management in Chilli	Plant Protection in Chilli. Nutrient Management in Vegetables	Field day, Kisan Melawa, Agri. Exhibition, Training, Diagnostic Visit	Fertilisers Soil Testing
07	Nutrient Management	Soyabean	Low yield due to imbalance Nutrient supply	--	Nutrient Management in Soyabean	Methodology of Soil Sampling ICM in Soyabean	Methodology of Soil Sampling ICM in Soyabean	Field Day	Soil Testing Bio-fertiliser
08	Nutrient Management	Red Gram	Low yield due to imbalance Nutrient supply	--	Nutrient Management in Red Gram	Methodology of Soil Sampling ICM in Red Gram	Methodology of Soil Sampling ICM in Red Gram	Field Day	Soil Testing Bio-fertiliser





**A.4. Abstract on the number of technologies refined in respect of livestock / enterprises**

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	--	--	--	--	--	--	--	--
Nutrition Management	--	--	--	--	--	--	--	--
Disease of Management	--	--	--	--	--	--	--	--
Value Addition	--	--	--	--	--	--	--	--
Production and Management	--	--	--	--	--	--	--	--
Feed and Fodder	--	--	--	--	--	--	--	--
Small Scale income generating enterprises	--	--	--	--	--	--	--	--
<b>TOTAL</b>	--	--	--	--	--	--	--	--

**B. Details of each On Farm Trial to be furnished in the following format**

**1) Title of on-farm trials**

**Nutrient Management in BT Cotton Variety RCH-2 BT**

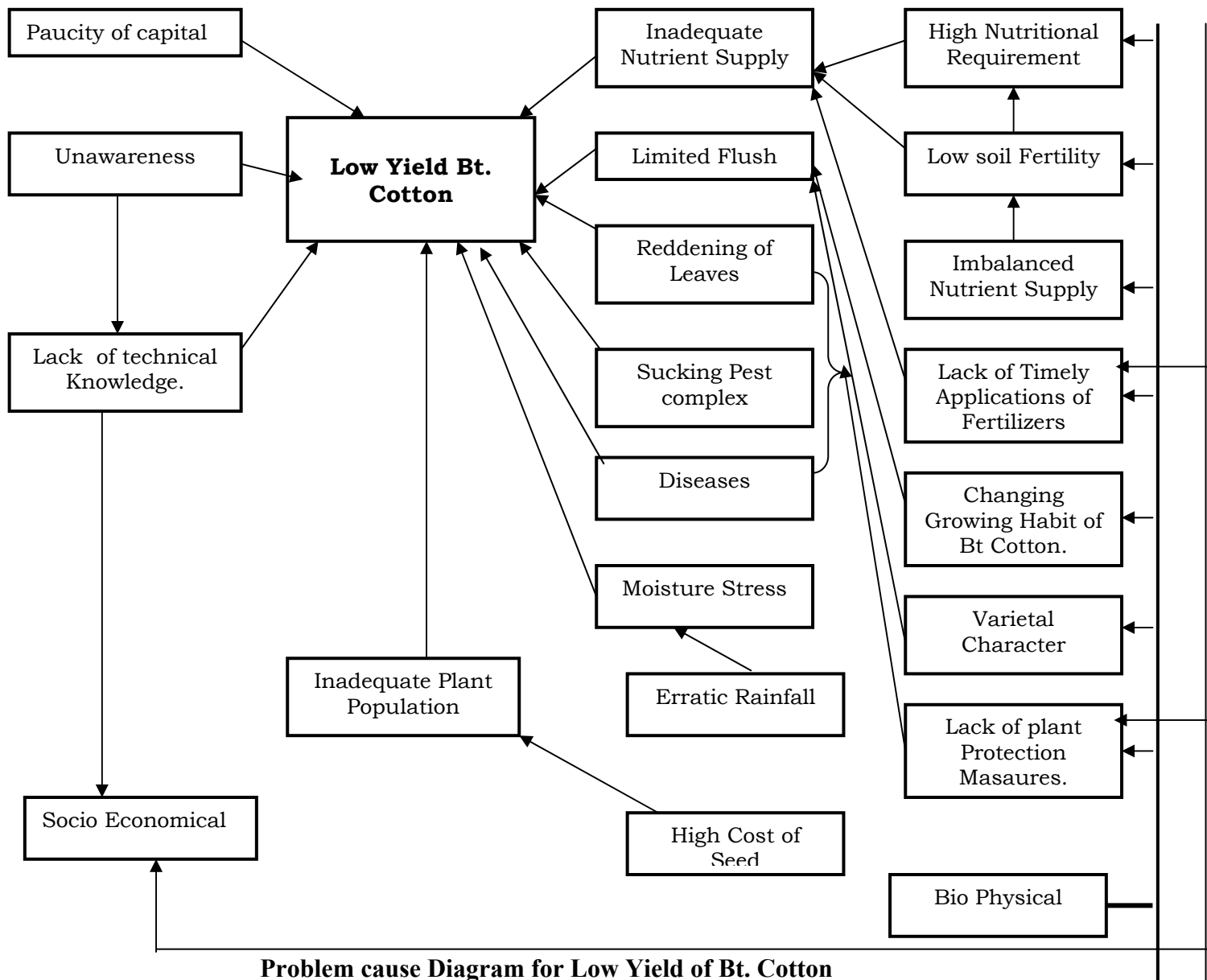
**2) Problem diagnosed**

Hingoli district comes under assured rainfall area receiving 890.34 mm average rainfall. About 4,21,300 ha land is available for cultivation, out of which 3,03,900 ha land is cultivated in Kharif season. Area under Cotton cultivation is about 69,590 ha. But the productivity is only 200 Kg lint / ha which is very low than the potential productivity.

Village Bhosi comes under Kalamnuri Tahasil where Cotton is taken mainly in Kharif season. Irrigation facilities are sufficient. Cotton is taken on about 167.68 ha but the average productivity is only 245 ling Kg/ha which is lower than the district.

Last two years, KVK Hingoli through its programs is in constant touch with Cotton (BT.) growers of the village. Through interactions and discussion with them, Low Yield Of Cotton as a problem was identified.

After critical analysis, following causes were identified for the low yield of Cotton (BT)



**Problem cause Diagram for Low Yield of Bt. Cotton**



### 3) Details of technologies selected for assessment/refinement

#### Details of technologies selected for refinement :-

##### T1 : Farmer's practice :-

54:65:65	N:P:K kg/ha
13:32.5:32.5	N:P:K kg/ha - at Sowing
41: 32.5 :32.5	N:P:K kg/ha – 30 DAS

##### T2 : Recommended Practice :-

80:40:40	N:P:K kg/ha
40:40:40	N:P:K kg/ha - at Sowing as basal dose
40:00:00	N:P:K kg/ha - 25-30 DAS as a top dressing

##### T3 : Refined practice :-

Based on application of RDF along with micro-nutrient based on soil analysis report.

#### 4) Source of technology :

For the trial, recommendation by RASI seed company in consultation with Dr. S.S.Loah, Extension Agronomist, NARP ,Aurangabad, MAU, Parbhani were applied as source of technology.

#### 5) Production system and thematic area

In the village Bhosi, Cotton is taken as a main crop in the Kharif season (Cotton based production system). Cotton is taken as mono crop, and as intercrop with soyabean & Black gram.

“Integrated Nutrient Management” as a thematic area was identified.

#### 6.)Performance of the Technology with performance indicators :

Technology under refinement performs much better than the Recommended practices and Farmer's practices in terms of yield qt/ha. No. of Monopodia and Sympodia per plant, no. of mature bolls per plant and boll weight.

The refined treatment (T3) gives cotton seed yield (36.00 qt/ha) which is 16.67% more than recommended practice (T2) (30.00 qt/ha) and 36.11% more than the farmer's practice (T1) (23.00 qt/ha).

The refined treatment (T3) gives more square (30-37/plant) than the recommended treatment (T2) (25-28/plant) and T1 (20-25/plant), Sympodia (26/plant) than T2 (22/plant) and T1(20/plant), No. of mature bolls/ plant (70) than T2 (62) and T1 (55) and Boll weight (gm) (4.5 gm) than T2(4) and T1(3.8 gm).

The C:B ratio of refund practice (4.18) was found better than T2(3.94) and T1(3.22).

**7) Final recommendation for micro level situation :**

On the basis of the results obtained from the trial, as the treatment T3 formed significantly superior than the T2 and T1 both in terms of production and monetary returns per ha, the treatment T3 i.e., application of 80:40:40 N:P:K kg/ha along with the Zinc Sulphate 25 kg/ha is recommended for the micro level situation for better performance, this trial needs further assessment and repetition.

**8) Constraints identified and feedback for research :**

In the treatment T3 boll shading was 10% as compared to be 40% in T1 and 30% in T2 . Hence refinement in the recommended dose of fertilizer should be done same as treatment T3.

**9) Process of farmers participation and their reaction :**

***Methodology of conducting OFT***

i) Selection of Village :-

Village Bhosi was selected for the trial where BT cotton occupies maximum area, strong group activities and good farmer's participation in the program.

ii) Base line Survey :-

Before implementing the program, KVK conducted a base line survey of the village to identify the problems it's causes, intervention and strategy for the program implementation on 02.06.2007

iii) Selection of the farmers :-

Farmers were selected for the program, on the basis of land holding, interest of the farmers and also in program participation and location of the plots.

iv) Training program :-

To know the objectives of OFT and technical intervention, pre and post sowing training programs of selected farmers were conducted on Farmer's field at different growth stages of the crop.

v) Demonstrations :-

Demonstration of different critical inputs were conducted on farmer's field during periodic field visit, Necessary observations were collected.

vi) Extension activities :-

Extension activities like group meeting, field visit with farmers, field days were organized.

Farmer's reaction :-

By applying recommended dose of fertilizer (80:40:40 N:P:K kg/ha) with 25 kg  $ZnSO_4$  /ha yielded 16.67% more yield than RDF and 36.11% more than farmer's practice.

**C. Results of On Farm Trials**

Crop	Farming Situation	Problem Diagnosed	Title of the OFT	No. of Trials	Technology Refined	Parameters if refinement	Data on the parameters		
							T1	T2	T3
1	2	3	4	5	6	7	8		
Cotton	Irrigated	Nutrient requirement under limited Flush in BT Cotton	Nutrient Management in BT Cotton var. RCH-2 BT	05	Nutrient management	a) Cotton seed yield (kg/ha) b) No. of square/plant c) No. of monopodia/ plant d) No. of sympodia /plant e) No. of mature bolls /plant f) Boll weight (gm)	2300 20-25 03 20 55 3.8	3000 25-28 03 22 62 4.00	3600 30-37 03 26 70 4.50

Results of Refinement	Feedback from the farmer	Any refinement done	Justification for refinement	Technology refined	Production / ha (Av.) kg/ha	Net Return (Profit) in Rs./ha	C:B Ratio
9	10	11	12	13	14	15	16
a) T3 gives 16.67% more yield than T2 and 36.11% more than T1 b) C:B ratio for T3 (4.18) is higher than T2(3.94) & T1(3.22)	Treatment T3 gives more yield 16.67% than T2 & 36.11% than T1 and also good physiological & reproductive growth	Application of $Z_nSO_4$ along with RDF (80:40:40 N:P:K kg/ha)	Micro nutrients usually required in minute quantities nevertheless are vital to the growth of plants. Micro nutrient improve the chemical composition of fruits and are known to act as catalyst in promoting organic reactions taking place in plants (Rangana) than & Arumat 1995)	T1- Farmer's practice 54:65:65 N:P:K kg/ha T2- Recommended Practice 80:40:40 N:P:K kg/ha T3- Refined Practice based on Application of RDF along with micro-nutrient soil analysis report.	2300  3000  3600	43,844.00  61,742.00  73,492.00	3.22  3.94  4.18





**Table 02 : Production Farmer wise and treatment wise (Cotton seed kg/ha)**

Sr. No.	Name of Farmer	Treatments		
		T1	T2	T3
1	Saw. Rajabai Shankar Kokare	2100	2800	3250
2	Shankar Shyam Raut	2300	3000	3600
3	Madhukar Ramchandra Gade	2200	3050	3650
4	Gorakhnath Mahajan Hadole	2500	3250	3800
5	Shankar Nagorao Devkate	2200	2950	3500
	<b>Average</b>	<b>2300</b>	<b>3000</b>	<b>3600</b>

***Justification for Refinement :-***

Zn :-

- 1) Zn influences the information of some growth hormones in the plant
- 2) It is associated with water uptake and water relations in the plants.
- 3) It also influences the activity of certain enzymes.
- 4) It enhances potassium uptake which is important in photosynthesis, transpiration of assimilates, proteins and chlorophyll formation, for vigor and diseases resistance to plants .
- 5) Zn SO<sub>4</sub> with RDF increases the total N, P & K uptake, increases the dry matter accumulations nutrient concentration, Nutrient – use efficiency, Agronomic efficiency reduces losses of N, improves the partial factor productivity of applied N.

Organic Manure :-

Application of FYM enhanced the availability of N, P & K to the plants and also improved the soil environment, which encourage Proliferous root system resulting in better absorption of moisture and nutrients ( Paikary el al 2001)

(Ref. Singh Ravindra & Agarwal S. K. (2003) : Effects of level of farmyard manure & itrogen fertilization on grain yield and use efficiency of nutrients in wheat Indian journal of Agriculture science 75 (T) : 408-13)

**B. Details of each On Farm Trial to be furnished in the following format**

**1.Title of on-farm trials**

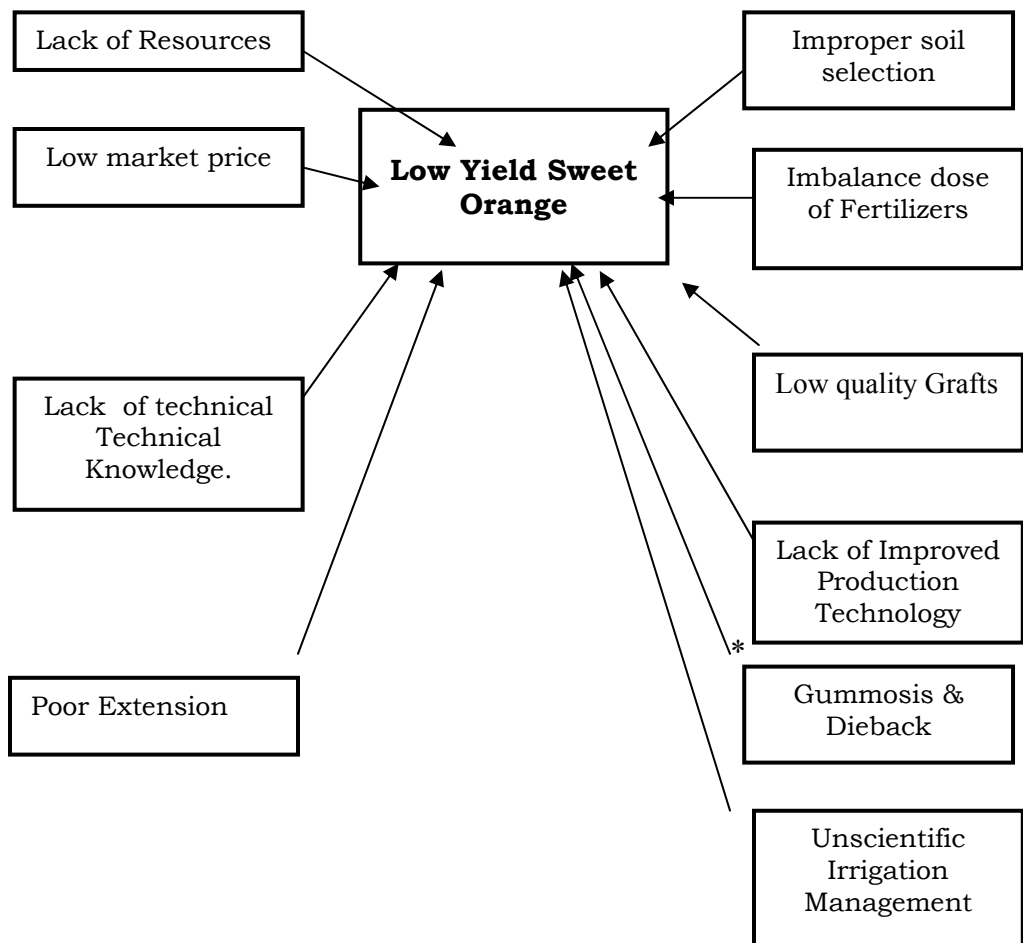
**Control of Gummosis & Dieback in Sweet Orange**

**2.Problem diagnosed :**

Citrus is one of the major fruit crop cultivated in Hingoli District including Sweet Orange, Mandarine orange and Kagazi Lime. The area under Sweet orange is near about 2713.04 ha. but the productivity (400-600 fruits / plant) & Life span of orchards reduces year by year due to Gummosis & Dieback.

Last two years through various program KVK is in constant touch with Sweet Orange grower and form a Sweet Orange growers Club in Dandegaon & Pardi village of Kalamnuri Tahasil. Through the intraction & discussion with them low yield & reduce life span of a tree as a problem was identified.

After critical analysis following causes were identified for Sweet Orange orchards.



### **Problem cause Diagram for Low Yield of Sweet Orange**

#### **3. Details of technologies selected for assessment/refinement**

##### **Details of technologies selected for refinement :-**

##### **T<sub>1</sub>- Farmer's Practice**

Application of Geru paste + Allium sativum + Hing

##### **T<sub>2</sub>- Recommended practices by MAU,Parbhani**

- Double ring method of irrigation
- Avoid contact of water and bud
- Removal of gum and application of Bordeaux paste twice in a year one before monsoon and second after monsoon
- Spray copper oxychloride / 1250 gm + 500 lit. water / ha. Or five spray of bordo mixture 1%
- Drenching soil with 1% bordo mixture / 0.3% copper oxychloride / 0.05% Ridomil
- Pruning of disease and dried branches and application of Bordeaux paste on cut ends

##### **T<sub>3</sub> . Refined practice**

Spray of Bavistin @ 1gm / lit of water followed by drenching of Ridomil @ 2gm/lit of water after 15 days followed by soil application of 50kg compost + 7.5kg neem cake + 1kg Ammonium sulphate + 150gm Trichoderma per plant followed by drenching of 0.6% Bordeaux mixture

#### **4) Source of technology :**

Marathwada Agricultural University, Parbhani

#### **5) Production system and thematic area :**

In the village Bhosi, Pardi and Dandegaon Sweet Orange is taken as a main fruit crop.

“Integrated Disease Management” as a thematic area was identified.

#### **6) Performance of the Technology with performance indicators:**

Technology under refinement performs much better than the Recommended practices and Farmer's practices in terms of yield T/ha. & percent recovery of the Plant affected by Gummosis & Dieback.

The refined treatment (T3) gives more yield (15.00 T/ha) which is 20% more than recommended practice (T2) (12.5 T/ha) and 66.67% more than the farmer's practice (T1) (09.00 T/ha).

The C:B ratio of refined practice (2.72) was found better than T2(2.38) and T1(1.8).

**7) Final recommendation for micro level situation :**

On the basis of the results obtained from the trial, as the treatment T3 formed significantly superior than the T2 and T1 both in terms of production and monetary returns per ha, the treatment T3 i.e., Spray of Bavistin @ 1gm / lit of water followed by drenching of Ridomil @ 2gm/lit of water after 15 days followed by soil application of 50kg compost + 7.5kg neem cake + 1kg Ammonium sulphate + 150gm Trichoderma per plant followed by drenching of 0.6% Bordeaux mixture is recommended for the micro level situation for better performance, this trial needs further assessment and repetition.

**8) Constraints identified and feedback for research :**

Research should be done on biological control of Gummosis & Dieback.

**9) Process of farmers participation and their reaction :**

***Methodology of conducting OFT***

i) Selection of Village :-

Village Bhosi, Pardi & Dandegaon were selected for the trial where Sweet Orange occupies maximum area, strong group activities and good farmer's participation in the program.

ii) Base line Survey :-

Before implementing the program, KVK conducted a base line survey of the village to identify the problems its causes, intervention and strategy for the program implementation on 12.06.2007

iii) Selection of the farmers :-

Farmers were selected for the program, on the basis of Disease Orchards, land holding, interest of the farmers and also in program participation and location of the plots.

iv) Training program :-

To know the objectives of OFT and technical intervention, training programs of selected farmers were conducted on Farmer's field at different stages of the program.

v) Demonstrations :-

Demonstration of different critical inputs were conducted on farmer's field during periodic field visit, Necessary observations were collected.

vi) Extension activities :-

Extension activities like group meeting, field visit with farmers, field days were organized.

Farmer's reaction :-

By Spray of Bavistin @ 1gm / lit of water followed by drenching of Ridomil @ 2gm/lit of water after 15 days followed by soil application of 50kg compost + 7.5kg neem cake + 1kg Ammonium sulphate + 150gm Trichoderma per plant followed by drenching of 0.6% Bordeaux mixture, more yield i.e. (15 T/ha) & Plant recovery (80%) were found.



a) T3 gives 80 % recovered plant while T2 65% and T1 20%	No of plant recovered is more & earlier in Treatment T3, as compaired to T1 & T2 also plant have good vegetative reproductive growth in Treatment T3.	Spray of Bavistin @ 1 gm / lit of water followed by drenching of Ridomil @ 2gm/lit of water after 15 days followed by soil appliction of 50kg compost + 7.5kg neem cake + 1kg Ammonium sulphate + 150gm Trichoderma per plant followed by drenching of 0.6% Bordeaux mixture	Drenching & spraying of system fungicide bavistine and Redomil over come the fungal attack quickly. Compost , Nimcake and Amonium Sulphate supplies the Nutrient and improve Soil Fertility & productivity & Microbial activity around roots zone.	T1:	09	32,000.00	1.80
				T2:	12.50	58,000.00	2.38
				T3:	15.00	76,000.00	2.72

### 3.2 Achievements of Frontline Demonstrations

#### Category : Oilseed (Crop Production)

a. Follow-up for results of FLDs implemented during year 2007-08

List of technologies demonstrated during previous year and popularized during 2007-08 and recommended for large scale adoption in the district

S. No	Crop/Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Soyabean	Varietal evaluation	varietal MAUS-81	1.more demonstrations , seed plot of MAUS-81 to be taken 2.Importance to be given oilseed development program	15	375	300

b.Details of FLDs implemented during 2007-08 (Oilseeds)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Soyabean	Varietal evaluation	Varietal (MAUS-81)	Kharif 2007	10	10	05	20	25	--

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg / ha.)	P (Kg / ha.)	K (Kg / ha.)					
Soyabean	Kharif 07	Rainfed / irrigated	light medium to deep	medium (290)	Medium (15.09)	Very high (756.68)	Cotton, Turmeric Gram, Groundnut, Wheat, Rabi Sorghum	29.0 6.07	14.1 0.07	838.46	52

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Soyabean	Varietal	MAUS-81	25	10	30	16	23.00	18.00	27.78	1. Yield 23.00 qt/ha 2. C:B ratio – 7.28 3. Oil content -20.58% 4. Protein content – 41.75%	1. Yield 18.00 qt/ha 2. C:B ratio –2.30 3. oil content -18.00% 4. Protein content – 36.90%

### Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
18242.00	18273.00	50700.00	42150.00	32458.00	23877.00	Demo-7.28 Check - 2.30

### Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Soyabean	Kahrif 07	1. Variety – MAUS-81	rainfed / irrigated	23.00	18.00	27.78

### Technical Feedback on the demonstrated technologies

S. No	Feed Back
<b>Soyabean</b>	
1	No significant differences in yield at ideal condition of MAUS-81
2	More vegetative growth
3	MAUS-81 is promising than JS-335 in Hingoli district. So it is suggested to take more demonstrations of this variety and given importance in oilseed development programme

### Farmers' reactions on specific technologies

S. No	Feed Back
1	Yield of soyabean MAUS-81 is more than JS-335
2	Fetch greater market prices
3	Less shattering problem than JS-335
4	Suitable in stress conditions
5	More no. of pods than JS-335

## Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
	<b>Soyabean</b>				
1	Field days	01	04.10.07	140	At Jaroda
2	Farmers Training	04	12.06.07	120	Concept & implementation of FLD at Jaroda
			20.06.07		Soyabean production technology on campus
			18.07.07		Plant protection measures in Soyabean at Jaroda
			22.08.07		After care in Soyabean at Jaroda
3	Exhibition	04	--	200	During different committee visit to KVK, on eve of programs collaborative programs conducted by DAO, during Sept.07 & Oct-07
4	Any Other	02	22.06.07	75	Seed treatment at Jaroda
			18.07.07		Insecticide application at Jaroda
5	Leaf lets	--	--	1000	Soyabean production technology
6	Special program	02	06.06.07	150	Village survey at Jaroda
			24.07.07		Program on How to maintain information book of FLD at Jaroda
7	News paper Coverage	02	09.10.07	--	Dainik Sakal
			10.10.07		Dainik Deshonnati

### Category : Oilseed (Soil Science)

#### a. Follow-up for results of FLDs implemented during year 2007-08

List of technologies demonstrated during previous year and popularized during 2007-08 and recommended for large scale adoption in the district

S. No	Crop/ Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Soyabean	Nutrient Management	Nutrient Management	1.more demonstrations on Nutrient Management to be taken 2.Group Visit	05	18	42

Details of FLDs implemented during 2007-08 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Soyabean	Nutrient Management	Nutrient Management	Kharif 2007	05	05	04	06	10	--

#### Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg / ha.)	P (Kg / ha.)	K (Kg / ha.)					
Soyabean	Kharif 07	Irrigated	Vertisole	Low (265)	Low (13.00)	Very high (670.00)	Cotton Wheat,R abi Sorghu m	29.06 .07	09.1 0.07	838.4 6	52

#### Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Soyabean	Nutrient Management	JS-335	10	05	31	16	28.00	23.00	21.74	1. Yield 28.00 qt/ha 2. C:B ratio – 2.60 3. N-280 Kg/ha 4. P- 11.50 Kg/ha 5. K-705.60 Kg/ha	1. Yield 23.00 qt/ha 2. C:B ratio –2.11 3.N-243 Kg/ha 4.P- 10.30 Kg/ha 5.K-683.00 Kg/ha

**Economic Impact (continuation of previous table)**

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
18478.00	18778.00	48225.00	39675.00	29747.00	20897.00	Demo- 2.60 Check - 2.11

**Analytical Review of component demonstrations :**

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Soyabean	Kahrif 07	Nutrient Management	irrigated	28.00	23.00	21.74

**Technical Feedback on the demonstrated technologies :**

S. No	Feed Back
Soyabean	
1	In Jaroda 50% cultivator adopted Nutrient Management Practice in Soyabean based on Soil Test . They supply phosphorus through SSP & hence 18-22 % yield increase as compaired to local

**Farmers' reactions on specific technologies :**

S. No	Feed Back
1	Increases yield give to Nutrient Management in Soyabean.
2	Increases fertilizer use efficiency.
3	Save cost of fertilizers.
4	Enhances soil fertility.

## Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
	Soyabean				
1	Field days	01	04.10.07	140	At Jaroda
2	Farmers Training	04	12.06.07	120	Concept & implementation of FLD at Jaroda
			20.06.07		Soyabean production technology on campus
			18.07.07		Plant protection measures in Soyabean at Jaroda
			22.08.07		After care in Soyabean at Jaroda
3	Exhibition	04	--	200	During different committee visit to KVK, on eve of programs collaborative programs conducted by DAO, during Sept.07 & Oct-07
4	Any Other	02	22.06.07	75	Seed treatment at Jaroda
			18.07.07		Insecticide application at Jaroda
5	Leaf lets	--	--	1000	Soyabean production technology
6	Special program	02	06.06.07	150	Village survey at Jaroda
			24.07.07		Program on How to maintain information book of FLD at Jaroda
7	News paper Coverage	02	09.10.07	--	Dainik Sakal
			10.10.07		Dainik Deshonnati

**Category : Pulses (Crop Production)**

**a. Follow-up for results of FLDs implemented during year Kh.2007**

S. No	Crop / Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Redgram	Varietal evaluation	Redgram Variety BDN-708	1.more demonstrations , seed plot of BDN-708 to be taken 2.Importance to be given pulses development program	29	47	70

**b. Details of FLDs implemented during 2007-08**

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Red gram	Varietal evaluation	Varietal BDN-708	Kharif 2007	06	06	04	11	15	--



Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg/ha.)	P(Kg/ha.)	K(Kg/ha.)					
Red gram	Kharif 07	Rainfed / irrigated	Medium to deep heavy	Low (287)	Medium (14.30)	Very High (769.14)	Cotton, Turmeric, Gram, Groundnut, Wheat	28.06.07	02.12.07	838.46	52

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Red gram	Varietal	BDN-708	15	06	12.50	8.50	11.00	8.00	37.50	1. Yield 11.00 qt/ha 2. C:B ratio – 2.31 3. Protein content – 20.5% 4. resistant against wilt & sterility	1. Yield 8.00 qt/ha 2. C:B ratio – 1.43 3. Protein content – -



Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
13658.00	13785.00	31500.00	19700.00	17842.00	5915.00	Demo- 2.31 Check – 1.43

Analytical Review of component demonstrations .

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Red gram	Kharif 07	1. Variety BDN-708	rainfed / irrigated	11.00	8.00	37.50

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Red gram	
1	variety BDN-708 gives more yield about 47.4% & 15.7% than Badnapur -2 & BSMR-853 respectively
2	As BDN-708 is resistant against wilt, sterility, pod borer complex, bold seeded , having protein content 20.50% having productivity 14-15 qt/ha , suitable for low rainfall area , much more demonstrations should be taken & seed may be made available

Farmers' reactions on specific technologies

S. No	Feed Back
Red gram	
1	Resistant against wilt
2	Resistant against sterility
3	Promising against pod borer complex
4	protein content 20.50%

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
	Red gram				
1	Field days	01	25.11.06	80	At Jaroda
2	Farmers Training	04	12.06.07 20.06.07 22.08.07 15.11.07	150	At Jaroda At On campus At.Jaroda At.Jaroda
3	Media coverage	01	--	--	News paper articles
4	Leaflets	--	--	500	Red Gram Production Technology

**Category : Pulses (Soil Science)**

a. Follow-up for results of FLDs implemented during year Kh.2007

S. No	Crop / Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Redgram	Nutrient Management	Nutrient Management based on Soil test.	1.more demonstrations on Nutrient Management based on soil test.	12	48	55

c. Details of FLDs implemented during 2007-08

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Red gram	Nutrient Management	Nutrient Management based on Soil test.	Khari f 2007	05	05	05	11	16	--



Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg/ha.)	P(Kg/ha.)	K(Kg/ha.)					
Red gram	Kharif 07	Rainfed / irrigated	Medium to deep heavy	Low (258)	Medium (16.70)	Very High (639.74)	Cotton, Turmeric, Gram, Wheat	25.06 .07	08.1 2.07	838.4 6	52

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Red gram	Nutrient Management	BD N-708	16	05	13.00	8.00	12.00	9.00	33.33	1. Yield 12.00 qt/ha 2. C:B ratio – 2.14 3. Available N – 266.50 kg/ha 4. Available P – 14.90 kg/ha 5. Available K-654.19 kg/ha.	1. Yield 9.00 qt/ha 2. C:B ratio – 1.56 3. Available N – 262.70 kg/ha 4. Available P – 13.15 kg/ha 5. Available K-630.00 kg/ha.



Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
13093.00	13353.00	28100.00	20900.00	15007.00	7547.00	Demo- 2.14 Check – 1.56

Analytical Review of component demonstrations .

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Red gram	Kharif 07	Nutrient management (BDN-708)	rainfed / irrigated	12.00	9.00	33.33

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Red gram	
1	Nutrient Management based on soil test increase the yield 30 – 34 % & improve nutrient status of soil.

Farmers' reactions on specific technologies

S. No	Feed Back
Red gram	
1	Increase the yield due to proper nutrient supply.
2	Decreased the cost of fertilizer

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
	Red gram				
1	Field days	01	25.11.06	80	At Jaroda
2	Farmers Training	04	12.06.07 20.06.07 22.08.07 15.11.07	150	At Jaroda At On campus At.Jaroda At.Jaroda
3	Media coverage	01	--	--	News paper articles
4	Leaflets	--	--	500	Red Gram Production Technology

**Category : Cotton**

a. Follow-up for results of FLDs implemented during year 2007

List of technologies demonstrated during previous year and popularized during 2007-08 and recommended for large scale adoption in the district

S. No	Crop / Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Cotton	Integrated Crop Management	Production technology Arborium PA-402	1. Demonstrations 2. Trainings 3. Exposure visits 4. Print media	30	47	70

b. Details of FLDs implemented during 2007-08

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Cotton	Integrated Crop Management	Production technology Arborium P.A.-402	Khari f 2007	10	20	15	35	50	--



Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg/ha.)	P(Kg/ha.)	K(Kg/ha.)					
Cotton	Kharif 07	Rainfed / irrigated	Medium to light	Low (280)	Low (11.85)	Very high (663)	Cotton, R. Sorghum, Soyabean, Turmeric, Gram, Safflower	24.06.07	23.12.07	838.46	52

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Cotton	Production Technology	Arboreum P.A.-402	50	20	14.00	9.00	11.00	8.00	37.50	1. Yield 11.00 qt/ha 2. C:B ratio – 2.94	1. Yield 08.00 qt/ha 2. C:B ratio – 2.21



Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	
10119.00	8250.00	35750.00	24050.00	25631.00	15800.00	Demo-3.53 Check – 2.91

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Cotton	Kahrif 07	1. Variety – Arborium P.A.402	Rainfed irrigated	11.00	8.00	37.50

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Cotton	<p>Arborium variety P.A.-402 under production technology gives more yield than farmers practices. It's a tall growing hence should be made semi dwarf. Gap between the two bolls should be reduced. BT gene should be incorporated in Deshi Cotton. But in comparison with BT Cotton it will be not economical. Hence should be advised to farmers for sowing it as border crop.</p> <p><b>For Policy Considerations:</b></p> <p>P.A.-402 has significant characters. As it is a straight variety it should give importance in organic farming.</p>

Farmers' reactions on specific technologies

S. No	Feed Back
Cotton	<ul style="list-style-type: none"> <li>• PSB -Soil application of showed significant difference in vegetative growth of the crops and no. of square formation.</li> <li>• Cotton P.A.-402 : a) Good germination (90%). b) Easy to picking. C) No disease observed (wilt). D) No reddening on Deshi Cotton. E) No attack of leaf sucking insects. F) Tolerant to water stress. G) Attack of Boll worm on low scale(1 to 2 / plant) h) weight of Bolls- 3 gm/ boll i) Number of sympodia r) less as compared to fight.</li> <li>• Azotobactor : a) Reduces cost of fertilizer specially Nitrogeon. B) Enhances germination percentage.</li> </ul>

	<ul style="list-style-type: none"> <li>• Neemark: Controls Bollworms when sprayed 45 DAS and 60 DAS @ 90ml/15 lit water.</li> </ul> <p>Pre sowing of fertilizer resulted in sturdy growth of cotton and they harvested first flush earlier than local check plots.</p> <p>Weekly monitoring of pest helped to take proper control measures at proper time.</p> <p>Use of bio fertilizers i.e. Azotobactor and PSB was helpful for healthy growth of crop.</p> <p>Cotton planting at 45 x 22.5 sq c.m. spacing gives highest yield.</p>
--	--

Extension and Training activities under FLD

SI.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
	Cotton				
1	Field days	01	28.11.07	128	At Bhosi
2	Farmers Training	13	12.06.07 12.06.07 13.06.07 17.07.07 18.07.07 19.07.07 07.08.07 16.08.07 22.08.07 30.08.07 04.09.07 11.10.07 31.10.07	260	At. Bhosi At Jaroda At Kawadi At. Bhosi At Jaroda At Kawadi At. Bhosi At Kawadi At. Jaroda At.kawadi At. Bhosi At.Bhosi At. Bhosi (On Production Technology, Intercultivation and sucking pest control, Fertiliser management, Plant protection measures and After care)
3	Media coverage	03	30.11.07 02.12.07 01.12.07	--	Dy. Deshonnoti Dy. Deshonnoti Dy. Sakal
4	Group Discussion	03	24.07.07 25.07.07 26.07.07	55	At Bhosi At. Jaroda At. Kawadi

**Category : Chilli (Horticulture)**

a. Follow-up for results of FLDs implemented during year 2007

List of technologies demonstrated during previous year and popularized during 2007-08 and recommended for large scale adoption in the district

S. No	Crop / Enterprises	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Chilli	Nutrient Management	Nutrient Management	1. Demonstrations 2. Trainings 3. Exposure visits 4. Print media	08	70	20

b. Details of FLDs implemented during 2007-08

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Chilli	Nutrient Management	Nutrient Management	Khari f 2007	06	04	06	14	20	--



Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N (Kg/ha.)	P(Kg/ha.)	K(Kg/ha.)					
Chilli	Kharif 07	irrigated	Medium to light	Low (258.00)	Low (14.70)	Very high (449.34)	Cotton, Soyabean, Turmeric, Gram, Safflower	28.06.07	30.08.07	838.46	52

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Chilli	Nutrient Management	HPH-1900	20	04	160	147	152	120	26.67%	1. Yield 152 qt/ha 2. C:B ratio – 2.48	1. Yield 120 qt/ha 2. C:B ratio – 1.86



Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
61175.00	64250.00	152000.00	120000.00	90825.00	55750.00	Demo-2.48 Check – 1.86

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Chilli	Kahrif 07	Nutrient Management	irrigated	152	120	26.67

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Chilli	1- less infestation of sucking pest due to judicious application of fertilizer (Nitrogen) 2- Luster & size of fruit improves.

Farmers' reactions on specific technologies

S. No	Feed Back
Chilli	-Experiences the importance of balance Nutrient supply. -Balance supply of Nutrient give more yield & reduces Fertilizer cost. -Fetches High Market price.

Extension and Training activities under FLD

SI.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
	Chilli				
1	Field days	01	28.11.07	128	At Bhosi
2	Farmers Training	03	12.06.07 13.06.07 29.09.07	35 16 24	At. Bhosi At Jaroda At Jaroda Chilli Production Technology, Intercultivation and sucking pest control, Fertiliser management, Plant protection measures and After care)
3	Media coverage	--	--	--	--
4	Group Discussion	02	26.08.07 30.08.07	55	At Bhosi At. Jaroda At. Kawadi

c. Details of FLD on Enterprises

(i) Farm Implements







### 3.3 Achievements on Training (Including the sponsored, Vocational, FLD and trainings under Rain Water Harvesting Units ):

#### A) ON Campus

Thematic Area	No. of Courses	No. of Participants						Grand Total		
		Others			SC/ST			Male	Female	Total
		Male	Female	Total	Male	Female	Total			
<b>(A) Farmers &amp; Farm Women</b>										
<b>I Crop Production</b>										
Weed Management	--	--	--	--	--	--	--			--
Resource Conservation Technologies	--	--	--	--	--	--	--			--
Cropping Systems	--	--	--	--	--	--	--			--
Crop Diversification	--	--	--	--	--	--	--			--
Integrated Farming	--	--	--	--	--	--	--			--
Water management	--	--	--	--	--	--	--			--
Seed production	--	--	--	--	--	--	--			--
Nursery management	--	--	--	--	--	--	--			--
Integrated Crop Management	--	--	--	--	--	--	--			--
Fodder production	--	--	--	--	--	--	--			--
Production of organic inputs	--	--	--	--	--	--	--			--
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low volume and high value crops	--	--	--	--	--	--	--			--
Off-season vegetables	--	--	--	--	--	--	--			--
Nursery raising	--	--	--	--	--	--	--			--
Exotic vegetables like Broccoli	--	--	--	--	--	--	--			--
Export potential vegetables	--	--	--	--	--	--	--			--
Grading and standardization	--	--	--	--	--	--	--			--
Protective cultivation (Green Houses, Shade Net etc.)	--	--	--	--	--	--	--			--
Others ( Importance of Vegetables in Human Diet ) Preparation & Transplanting of Tomato & Chilli Seedlings	02	16	33	49	06	15	21	24	48	72
<b>b) Fruits</b>										
Training and Pruning	--	--	--	--	--	--	--			--
Layout and Management of Orchards	--	--	--	--	--	--	--			--
Cultivation of Fruit	--	--	--	--	--	--	--			--
Management of young plants/orchards	01	28	--	28	05	--	05	33	--	33
Rejuvenation of old orchards	--	--	--	--	--	--	--			--
Export potential fruits	--	--	--	--	--	--	--			--
Micro irrigation systems of orchards	--	--	--	--	--	--	--			--
Plant propagation techniques	--	--	--	--	--	--	--			--
<b>c) Ornamental Plants</b>										
Nursery Management	--	--	--	--	--	--	--			--
Management of potted plants	--	--	--	--	--	--	--			--
Export potential of ornamental plants	--	--	--	--	--	--	--			--
Propagation techniques of Ornamental Plants	--	--	--	--	--	--	--			--
<b>d) Plantation crops</b>										
Production and Management technology	--	--	--	--	--	--	--			--
Processing and value addition	--	--	--	--	--	--	--			--
<b>e) Tuber crops</b>										
Production and Management technology	01	35	05	40	04	02	06	39	07	46
Processing and value addition	--	--	--	--	--	--	--			--
<b>f) Spices</b>										
Production and Management technology	--	--	--	--	--	--	--			--
Processing and value addition	--	--	--	--	--	--	--			--
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	--	--	--	--	--	--	--			--
Production and management technology	--	--	--	--	--	--	--			--
Post harvest technology and value addition	--	--	--	--	--	--	--			--
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	01	11	07	18	07	07	14	18	14	32
Soil and Water Conservation	--	--	--	--	--	--	--			--











Cold water fisheries	---	--	--	--	--	--	--	--	--	--
Fish harvest and processing technology	---	--	--	--	--	--	--	--	--	--
Fry and fingerling rearing	---	--	--	--	--	--	--	--	--	--
Small scale processing	---	--	--	--	--	--	--	--	--	--
Post Harvest Technology	---	--	--	--	--	--	--	--	--	--
Tailoring and Stitching	---	--	--	--	--	--	--	--	--	--
Rural Crafts	---	--	--	--	--	--	--	--	--	--
Others(Soil test for micronutrient & role of micronutrient in Crop Production)	01	13	--	13	--	--	--	13	--	13
<b>TOTAL</b>	<b>07</b>	<b>79</b>	<b>07</b>	<b>86</b>	<b>28</b>	<b>03</b>	<b>31</b>	<b>172</b>	<b>10</b>	<b>182</b>
<b>(C) Extension Personnel</b>										
Productivity enhancement in field crops	--	--	--	--	--	--	--	--	--	--
Integrated Pest Management	---	--	--	--	--	--	--	--	--	--
Integrated Nutrient management	---	--	--	--	--	--	--	--	--	--
Rejuvenation of old orchards	---	--	--	--	--	--	--	--	--	--
Protected cultivation technology	---	--	--	--	--	--	--	--	--	--
Formation and Management of SHGs	---	--	--	--	--	--	--	--	--	--
Group Dynamics and farmers organization	---	--	--	--	--	--	--	--	--	--
Information networking among farmers	---	--	--	--	--	--	--	--	--	--
Capacity building for ICT application	---	--	--	--	--	--	--	--	--	--
Care and maintenance of farm machinery and implements	---	--	--	--	--	--	--	--	--	--
WTO and IPR issues	---	--	--	--	--	--	--	--	--	--
Management in farm animals	---	--	--	--	--	--	--	--	--	--
Livestock feed and fodder production	---	--	--	--	--	--	--	--	--	--
Household food security	---	--	--	--	--	--	--	--	--	--
Women and Child care	---	--	--	--	--	--	--	--	--	--
Low cost and nutrient efficient diet designing	---	--	--	--	--	--	--	--	--	--
Production and use of organic inputs	---	--	--	--	--	--	--	--	--	--
Gender mainstreaming through SHGs	---	--	--	--	--	--	--	--	--	--
Others	--	--	--	--	--	--	--	--	--	--
Other	--	--	--	--	--	--	--	--	--	--
<b>TOTAL</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Grand Total</b>	<b>38</b>	<b>858</b>	<b>67</b>	<b>925</b>	<b>198</b>	<b>27</b>	<b>225</b>	<b>1056</b>	<b>94</b>	<b>1150</b>

**C) Consolidated table (ON and OFF Campus)**

Thematic Area	No. of Courses	No. of Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>(A) Farmers &amp; Farm Women</b>										
<b>I Crop Production</b>										
Weed Management	---	--	--	--	--	--	--	--	--	--
Resource Conservation Technologies	---	--	--	--	--	--	--	--	--	--
Cropping Systems	---	--	--	--	--	--	--	--	--	--
Crop Diversification	---	--	--	--	--	--	--	--	--	--
Integrated Farming	---	--	--	--	--	--	--	--	--	--
Water management	---	--	--	--	--	--	--	--	--	--
Seed production	---	--	--	--	--	--	--	--	--	--
Nursery management	---	--	--	--	--	--	--	--	--	--
Integrated Crop Management	06	209	19	228	44	05	49	253	24	277
Fodder production	--	--	--	--	--	--	--	--	--	--
Production of organic inputs	--	--	--	--	--	--	--	--	--	--
Others(Pest management in Summer Ground nut, Wheat & Gram Production Technology)	03	56	41	97	22	20	42	78	61	139
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low volume and high value crops	01	27	04	31	12	02	14	39	06	45
Off-season vegetables										
Nursery raising										
Exotic vegetables like Broccoli	---	--	--	--	--	--	--	--	--	--
Export potential vegetables	---	--	--	--	--	--	--	--	--	--
Grading and standardization	---	--	--	--	--	--	--	--	--	--
Protective cultivation (Green Houses, Shade Net etc.)	01	18	04	22	06	02	08	24	06	30
Other : ( )	--	--	--	--	--	--	--	--	--	--
<b>b) Fruits</b>										
Training and Pruning	--	--	--	--	--	--	--	--	--	--
Layout and Management of Orchards	01	30	--	30	04	--	04	34	--	34
Cultivation of Fruit	01	22	--	22	08	--	08	30	--	30
Management of young plants/orchards	02	50	--	50	11	--	11	61	--	61
Rejuvenation of old orchards	---	--	--	--	--	--	--	--	--	--
Export potential fruits	---	--	--	--	--	--	--	--	--	--
Micro irrigation systems of orchards	---	--	--	--	--	--	--	--	--	--
Plant propagation techniques										
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants	---	--	--	--	--	--	--	--	--	--
Export potential of ornamental plants	---	--	--	--	--	--	--	--	--	--
Propagation techniques of Ornamental Plants										
<b>d) Plantation crops</b>										
Production and Management technology	---	--	--	--	--	--	--	--	--	--
<b>Processing and value addition</b>										
<b>e) Tuber crops</b>										



Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides	---	--	--	--	--	--	--	--	--	
<b>VIII Fisheries</b>	---	--	--	--	--	--	--	--	--	
Integrated fish farming	---	--	--	--	--	--	--	--	--	
Carp breeding and hatchery management	---	--	--	--	--	--	--	--	--	
Carp fry and fingerling rearing	---	--	--	--	--	--	--	--	--	
Composite fish culture	---	--	--	--	--	--	--	--	--	
Hatchery management and culture of freshwater prawn	---	--	--	--	--	--	--	--	--	
Breeding and culture of ornamental fishes	---	--	--	--	--	--	--	--	--	
Portable plastic carp hatchery	---	--	--	--	--	--	--	--	--	
Pen culture of fish and prawn	---	--	--	--	--	--	--	--	--	
Shrimp farming	---	--	--	--	--	--	--	--	--	
Edible oyster farming	---	--	--	--	--	--	--	--	--	
Pearl culture	---	--	--	--	--	--	--	--	--	
Fish processing and value addition	---	--	--	--	--	--	--	--	--	
<b>IX Production of Inputs at site</b>	---	--	--	--	--	--	--	--	--	
Seed Production	---	--	--	--	--	--	--	--	--	
Planting material production	---	--	--	--	--	--	--	--	--	
Bio-agents production	---	--	--	--	--	--	--	--	--	
Bio-pesticides production	---	--	--	--	--	--	--	--	--	
Bio-fertilizer production	---	--	--	--	--	--	--	--	--	
Vermi-compost production	---	--	--	--	--	--	--	--	--	
Organic manures production	---	--	--	--	--	--	--	--	--	
Production of fry and fingerlings	---	--	--	--	--	--	--	--	--	
Production of Bee-colonies and wax sheets	---	--	--	--	--	--	--	--	--	
Small tools and implements	---	--	--	--	--	--	--	--	--	
Production of livestock feed and fodder	---	--	--	--	--	--	--	--	--	
Production of Fish feed	---	--	--	--	--	--	--	--	--	
<b>X Capacity Building and Group Dynamics</b>	---	--	--	--	--	--	--	--	--	
Leadership development	---	--	--	--	--	--	--	--	--	
Group dynamics	---	--	--	--	--	--	--	--	--	
Formation and Management of SHGs	01	--	35	35	--	04	04	--	39	39
Mobilization of social capital	---	--	--	--	--	--	--	--	--	
Entrepreneurial development of farmers/youths	01	11	66	77	05	30	35	16	96	112
WTO and IPR issues	02	51	--	51	04	--	04	55	--	55
<b>XI Agro-forestry</b>	---	--	--	--	--	--	--	--	--	
Production technologies	---	--	--	--	--	--	--	--	--	
Nursery management	---	--	--	--	--	--	--	--	--	
Integrated Farming Systems	---	--	--	--	--	--	--	--	--	
<b>XII Others (Pl. Specify)</b>	---	--	--	--	--	--	--	--	--	
<b>TOTAL</b>	<b>41</b>	<b>957</b>	<b>206</b>	<b>1163</b>	<b>209</b>	<b>82</b>	<b>291</b>	<b>1166</b>	<b>288</b>	<b>1454</b>
<b>(B) RURAL YOUTH</b>	---	--	--	--	--	--	--	--	--	
Mushroom Production	---	--	--	--	--	--	--	--	--	
Bee-keeping	---	--	--	--	--	--	--	--	--	
Integrated farming	---	--	--	--	--	--	--	--	--	
Seed production	---	--	--	--	--	--	--	--	--	
Production of organic inputs	---	--	--	--	--	--	--	--	--	
Integrated Farming	01	18	07	25	05	02	07	23	09	32
Planting material production	01	17	05	22	03	--	03	20	05	25

Vermi-culture	04	105	02	107	17	--	17	122	02	1 2 4
Sericulture	---	--	--	--	--	--	--		--	
Protected cultivation of vegetable crops	---	--	--	--	--	--	--		--	
Commercial fruit production	---	--	--	--	--	--	--		--	
Repair and maintenance of farm machinery and implements	---	--	--	--	--	--	--		--	
Nursery Management of Horticulture crops	02	36	05	41	09	03	12	45	08	5 3
Training and pruning of orchards	--	--	--	--	--	--	--		--	
Value addition	01	15	10	25	07	04	11	22	14	3 6
Production of quality animal products	--	--	--	--	--	--	--		--	
Dairying	01	16	--	16	05	--	05	21	--	2 1
Sheep and goat rearing	--	--	--	--	--	--	--		--	
Quail farming	--	--	--	--	--	--	--		--	
Piggery	--	--	--	--	--	--	--		--	
Rabbit farming	--	--	--	--	--	--	--		--	
Poultry production	02	45	10	55	20	04	24	65	14	7 9
Ornamental fisheries	---	--	--	--	--	--	--		--	
Para vets	---	--	--	--	--	--	--		--	
Para extension workers	---	--	--	--	--	--	--		--	
Composite fish culture	---	--	--	--	--	--	--		--	
Freshwater prawn culture	---	--	--	--	--	--	--		--	
Shrimp farming	---	--	--	--	--	--	--		--	
Pearl culture	---	--	--	--	--	--	--		--	
Cold water fisheries	---	--	--	--	--	--	--		--	
Fish harvest and processing technology	---	--	--	--	--	--	--		--	
Fry and fingerling rearing	---	--	--	--	--	--	--		--	
Small scale processing	---	--	--	--	--	--	--		--	
Post Harvest Technology	---	--	--	--	--	--	--		--	
Tailoring and Stitching	---	--	--	--	--	--	--		--	
Rural Crafts										
Others(Self Employment in Agriculture, Planting material production, Soil test for micronutrient & role of micronutrient in Crop Production) Diagnosis of plant nutrient deficiency	01	13	--	13	--	--	--	13	--	1 3
<b>TOTAL</b>	<b>13</b>	<b>265</b>	<b>39</b>	<b>304</b>	<b>66</b>	<b>13</b>	<b>79</b>	<b>331</b>	<b>52</b>	<b>3 8 3</b>
<b>(C) Extension Personnel</b>										
Productivity enhancement in field crops	--	--	--	--	--	--	--		--	
Integrated Pest Management	---	--	--	--	--	--	--		--	
Integrated Nutrient management	---	--	--	--	--	--	--		--	
Rejuvenation of old orchards	---	--	--	--	--	--	--		--	
Protected cultivation technology	---	--	--	--	--	--	--		--	
Formation and Management of SHGs	---	--	--	--	--	--	--		--	
Group Dynamics and farmers organization	---	--	--	--	--	--	--		--	
Information networking among farmers	---	--	--	--	--	--	--		--	
Capacity building for ICT application	---	--	--	--	--	--	--		--	
Care and maintenance of farm machinery and implements	---	--	--	--	--	--	--		--	
WTO and IPR issues	---	--	--	--	--	--	--		--	
Management in farm animals										
Livestock feed and fodder production	---	--	--	--	--	--	--		--	
Household food security	---	--	--	--	--	--	--		--	

Women and Child care	---	--	--	--	--	--	--		--	
Low cost and nutrient efficient diet designing	---	--	--	--	--	--	--		--	
Production and use of organic inputs	---	--	--	--	--	--	--		--	
Gender mainstreaming through SHGs	---	--	--	--	--	--	--		--	
Any other (Pl. Specify)										
<b>TOTAL</b>										
<b>Grand Total</b>	<b>54</b>	<b>1222</b>	<b>245</b>	<b>1467</b>	<b>275</b>	<b>95</b>	<b>370</b>	<b>149 7</b>	<b>340</b>	<b>2 2 9 2</b>

